

PROFIT & LOSS

EXERCISE

- The cost price of 36 books is equal to the selling price of 30 books. The gain per cent is :
(a) 20% (b) $16\frac{4}{6}\%$
(c) 18% (d) $82\frac{2}{6}\%$
- The cost price of 15 articles is same as the selling price of 10 articles. The profit percent is:
(a) 30% (b) 40%
(c) 50% (d) 45%
- If 3 toys are sold at the cost price of 4 toys of the same kind, the profit will be:
(a) 25% (b) $33\frac{1}{3}\%$
(c) $66\frac{2}{3}\%$ (d) 50%
- If the cost price of 15 tables is equal to the selling price of 20 tables. the loss per cent is :
(a) 20% (b) 30%
(c) 25% (d) 37.5%
- The cost price of 18 articles is equal to the selling price of 15 articles. The gain percent is:
(a) 15% (b) 20%
(c) 25% (d) 18%
- The ratio of cost price and selling price is 5 : 4, the loss per cent is:
(a) 20% (b) 25%
(c) 40% (d) 50%
- The ratio of the C. P. and S. P. of an article is 20 : 21. What is the gain per cent ?
(a) 5% (b) 5.5%
(c) 6% (d) 6.25%
- If selling price of an article is $\frac{8}{5}$ times of its cost price, the profit per cent on it is:
(a) 120% (b) 160%
(d) 40% (d) 60%
- If the cost price of 50 oranges is equal to the selling price of 40 oranges, then the profit per cent is
(a) 5% (b) 10%
(c) 20% (d) 25%
- If the cost price of 12 oranges is equal to selling price of 10 oranges, then the percentage of profit is
(a) $16\frac{2}{3}\%$ (b) 20%
(c) 18% (d) 25%
- If the cost price of 10 articles is equal to the selling price of 9 articles, the gain or loss per cent is
(a) $11\frac{1}{9}\%$ profit (b) $7\frac{6}{17}\%$ profit
(c) $11\frac{1}{9}\%$ loss (d) $1\frac{12}{13}\%$ loss
- In selling an article for Rs.76, there is a profit of 52%. If it is sold for Rs. 75, the profit per cent will be
(a) 44% (b) 46%
(c) 48% (d) 50%
- If the cost price of 12 pens is equal to the selling price of 8 pens, the gain per cent is :
(a) $33\frac{1}{3}\%$ (b) $66\frac{2}{3}\%$
(c) 25% (d) 50%
- A merchant marked cloth at 50 metre. He offers 2 successive discounts of 15% and 20%. The net price/metre is:
(a) ₹ 32.50 (b) ₹ 42.50
(c) ₹ 34.00 (d) ₹ 40.00
(SSC CGL Pre Exam 2016)
- If the cost price of 10 articles is equal to the selling price of 7 articles, then the gain or loss percent is :
(a) 51% gain (b) $42\frac{6}{7}\%$ gain
(c) 35% loss (d) $42\frac{6}{7}\%$ loss
- A coconut merchant finds that the cost price of 2750 coconuts is the same as the selling price of 2500 coconuts. His loss or gain will be
(a) 5% (b) 10% gain
(c) 15% loss (d) 20% gain
- If the cost price of 15 books is equal to the selling price of 20 books. The loss percent is
(a) 16 (b) 20
(c) 24 (d) 25
- If the cost price of 10 chairs be equal to selling price of 18 chairs then the loss percent is
(a) 9.6 (b) $44\frac{4}{9}$
(c) 20 (d) 37.5
- If the loss of percent on article is 15%. Then the ratio of the cost price and sell price will be
(a) 17 : 20 (b) 20 : 17
(c) 23 : 15 (d) 15 : 23
(SSC CGL Pre Exam 2016)
- The cost price of 24 apples is the same as the selling price of 18 apples. The percentage of gain is:
(a) $12\frac{1}{2}$ (b) $14\frac{2}{3}$
(c) $16\frac{2}{3}$ (d) $33\frac{1}{3}$
- If the cost price of an article is 80% of its selling price, the profit percent is:
(a) 20% (b) $22\frac{1}{2}\%$
(c) 24% (d) 25%

22. List price of TV is Rs. 2300 and discount series found to be 25% and 10%. Then the selling price of TV is
(a) Rs. 1255.5 (b) Rs. 1525.5
(c) Rs. 1552.5 (d) Rs. 1555.2
(SSC CGL Pre Exam 2016)
23. The cost price of 400 lemons is equal to the selling price of 320 lemons. then the profit percent is
(a) 15% (b) 20%
(c) 25% (d) 40%
24. The cost price : selling price of an article is a : b . If b is 200% of a then the percentage of profit on cost price is
(a) 75% (b) 125%
(c) 100% (d) 200%
25. A person sells 400 mangoes at the cost price of 320 mangoes. His percentage of loss is
(a) 10 (b) 15
(c) 20 (d) 25
26. Gopi goes from place A to B to buy an article costing 15% less at B. although he spends Rs. 150 on travelling, still he gains Rs. 150 compared to buying it at A. His profit percent is:
(a) 4.5 (b) 6
(c) 7.5 (d) 8
(SSC CGL Pre Exam 2016)
27. If the cost price of 18 articles is equal to the selling price of 16 articles, the gain or loss is
(a) 25% gain (b) 25% loss
(c) $12\frac{1}{2}\%$ loss (d) $12\frac{1}{2}\%$ gain
(SSC Const. (GD) Exam 22.04.2012)
28. If toys are bought at Rs. 5 each and sold at Rs. 4.50 each, then the loss is:
(a) 10% (b) 115%
(c) 12% (d) 13%
(SSC FCI Asst. Exam 05.02.2012)
29. The price of a refrigerator and a television set are in the ratio 5 : 3. If the refrigerator costs Rs.5500 more than the television set, then the price of the referigerator is :
(a) Rs.27500 (b) Rs. 8250
(c) Rs. 13750 (d) Rs. 16500
(SSC CHSL DEO & LDC Exam 1.10.2012)
30. If books bought at prices from Rs. 150 to Rs. 300 are sold at prices ranging from Rs. 250 to Rs. 350. what is the greatest possible profit that might be made in selling 15 books ?
(a) Cannot be determined
(b) Rs. 750
(c) Rs. 4,250
(d) Rs. 3,000
(SSC CHSL DEO & LDC Exam 20.10.2013)
31. An article marked at Rs. 540 is sold at Rs. 496.80 in an off-season offer. Then the rate of discount offered (in percent) is
(a) 7 (b) 7.5
(c) 8 (d) 10
(SSC CGL Pre Exam 2016)
32. A house and a shop were sold for Rs. 1 lakh each, In this transaction, the house sale resulted into 20% loss whereas the shop sale into 20% profit. The entire transaction resulted in :
(a) no loss no gain
(b) gain of Rs. $\frac{1}{24}$ lakh
(c) loss of Rs. $\frac{1}{12}$ lakh
(d) loss of Rs. $\frac{1}{18}$ lakh
33. A shopkeeper sells two T. V. sets at the same price. There is a gain of 20% on one TV and a loss of 20% on the other. State which of the following statement is correct
(a) The shopkeeper makes no net gain or profit
(b) The shopkeeper loses by 2%
(c) The shopkeeper gains by 4%
(d) The shopkeeper loses by 4%
34. A man sells two pipes at Rs. 12 each. He gains 20% on one and loses 20% on the other. In the whole transaction, there is
(a) neither loss nor gain
(b) Profit of Rs. 1
(c) Loss of Rs. 1
(d) profit of Rs. 2
35. Bhuvnesh sells two tape recorders at the same price .On one, he gains 10% and on the other he loses 10%. The total gain or loss in the transaction is
(a) 1% gain (b) 1% loss
(c) No loss or gain
(d) 2% loss
36. A man bought a watch for 10% discount. If he had bought for 20% discount he would have got the watch for ₹ 125 less. The marked price of the watch is.
(a) ₹ 2500 (b) ₹ 1250
(c) ₹ 3750 (d) ₹ 1000
(SSC CGL Pre Exam 2016)
37. By selling a tape-recorder for ₹ 1040 a man gains 4%. If he sells it for ₹ 950, his loss will be
(a) 5% (b) 4%
(c) 4.5% (d) 9%
(SSC CGL Pre Exam 2016)
38. A television and a refrigerator were sold for Rs. 12,000 each If the television was sold at a loss of 20% of the cost and the refrigerator at a gain of 20% of the cost, the entire transaction resulted in
(a) No loss or gain
(b) Loss of Rs. 1,000
(c) Gain of Rs. 1,000
(d) Loss of Rs. 1,200
39. Two bicycles were sold for Rs. 3990 each gaining 5% on one and losing 5% on other. The gain or loss per cent on the whole transaction is:
(a) neither gain nor loss
(b) 2.5% gain
(c) 2.5% loss
(d) 0.25% loss
40. A cloth merchant has announced 25% rebate in prices If one needs to have a rebate of ₹ 40 then how many metres of cloth costing ₹ 32 per metre he should purchase.
(a) 6m (b) 5m
(c) 10m (d) 7m
(SSC CGL Pre Exam 2016)
41. A T.V was sold at a profit of 5% If it had been sold at a profit of 10% the profit would have been ₹ 1000 more. What is its cost price?
(a) ₹ 20000 (b) ₹ 5000
(c) ₹ 10000 (d) ₹ 15000
(SSC CGL Pre Exam 2016)
42. A man sells two chairs at Rs. 120 each and by doing so he gains 25% on one chair and loses 25% on the other. His loss on the whole in Rs. is
(a) 20 (b) 16
(c) 25 (d) 30
(SSC FCI Asst. Grade III Exam 11.11.2012)

43. A man sold two articles at Rs. 375 each. On one, he gains 25% and on the other, he loses 25%. The gain or loss% on the whole transaction is
(a) 6% loss (b) $4\frac{1}{6}\%$ profit
(c) Rs. 50 profit (d) $6\frac{1}{4}\%$ loss
44. A man wanted to sell an article with 20% profit: but he actually sold at 20% loss for Rs. 480. At what price he wanted to sell it to earn the profit?
(a) Rs. 720 (b) 840
(c) Rs. 600 (d) Rs. 750
45. If an article is sold at 5% gain instead of 5% loss, the man gains Rs. 5 more. Find the cost price of that article
(a) Rs. 100 (b) Rs. 105
(c) Rs. 50 (d) Rs. 110
46. On selling an article for Rs. 105 a trader loses 9%. To gain 30% he should sell the article at
(a) Rs. 126 (b) Rs. 144
(c) Rs. 150 (d) Rs. 139
47. An article is sold at a loss of 10%. Had it been sold for Rs. 9 more there would have been a gain of $12\frac{1}{2}\%$ on it. The cost price of the article is:
(a) Rs. 40 (b) Rs. 45
(c) Rs. 50 (d) Rs. 35
48. By selling a table for Rs. 350 instead of Rs. 400, loss per cent increases by 5%. The cost price of table is:
(a) Rs. 1,050 (b) Rs. 417.50
(c) Rs. 435 (d) Rs. 1,000
49. A shopkeeper sells an article at a loss of $12\frac{1}{2}\%$. Had he sold it for Rs. 51.80 more, he would have earned a profit of 6%. The cost price of the article is
(a) Rs. 280 (b) Rs. 300
(c) Rs. 380 (d) Rs. 400
50. A person sells a table at a profit of 10%. If he had bought the table at 5% less cost and sold for Rs. 80 more, he would have gained 20%. The cost price of the table is
(a) Rs. 3,200 (b) Rs. 2,500
(c) Rs. 2,000 (d) Rs. 200
51. An article is sold at a profit of 20%. If it had been sold at a profit of 25%, it would have fetched Rs. 35 more. The cost price of the article is:
(a) Rs. 650 (b) Rs. 700
(c) Rs. 750 (d) Rs. 800
52. A man gains 20% by selling an article for a certain price. If he sells it at double the price, the percentage of profit will be:
(a) 40 (b) 140
(c) 100 (d) 120
53. A radio is sold for Rs. 990 at a profit of 10%. What would have been the actual profit or loss on it had it been sold for Rs. 890?
(a) Rs. 10 loss (b) Rs. 10 profit
(c) Rs. 90 loss (d) Rs. 90 profit
54. A man gets Rs. 13 more by selling an article at a profit of $12\frac{1}{2}\%$ than selling it at a loss of $12\frac{1}{2}\%$. The cost price of the article is:
(a) Rs. 25.50 (b) Rs. 38
(c) Rs. 52 (d) Rs. 65
55. The percentage of loss when an article is sold at Rs. 50 is the same as that of the profit when it is sold at Rs. 70. The above-mentioned percentage of profit or loss on the article is
(a) 10% (b) $16\frac{2}{3}\%$
(c) 20% (d) $22\frac{2}{3}\%$
56. A man sells an article at 10% loss. If he had sold it at Rs. 10 more, he would have gained 10%. The cost price of the article is
(a) Rs. 50 (b) Rs. 55
(c) Rs. 100 (d) Rs. 110
57. If a man were to sell his chair for Rs. 720, he would lose 25%. To gain 25% he should sell it for
(a) Rs. 1,200 (b) Rs. 1,000
(c) Rs. 960 (d) Rs. 900
58. A book seller sells a book at a profit of 10%. If he had bought it at 4% less and sold it for Rs. 6 more, he would have gained $18\frac{3}{4}\%$. The cost price of the book is
(a) Rs. 130 (b) Rs. 140
(c) Rs. 150 (d) Rs. 160
59. An increase of Rs. 3 in the selling price of an article turns a loss of $7\frac{1}{2}\%$ into a gain of $7\frac{1}{2}\%$. The cost price (in Rs.) of the article is:
(a) 25 (b) 20
(c) 15 (d) 10
60. A businessman sells a commodity at 10% profit. If he had bought it at 10% less and sold it for Rs. 2 less, then he would have gained $16\frac{2}{3}\%$. The cost price of the commodity is
(a) Rs. 32 (b) Rs. 36
(c) Rs. 40 (d) Rs. 48
61. A store sells a watch for a profit of 25% of the cost price. Then the percentage of profit against selling price is
(a) 22% (b) 20%
(c) 18% (d) 15%
- (SSC CGL Pre Exam 2016)
62. If the selling price of an article is doubled, then its loss percent is converted into equal profit percent. The loss percent on the article is
(a) $26\frac{2}{3}\%$ (b) 33%
(c) $33\frac{1}{3}\%$ (d) 34%
63. A man sold some articles at a gain of 10%. He spent his total sale proceeds to purchase such articles again. This time, while selling them, he incurred a loss of 10%. His loss or gain in the transaction was
(a) 1% loss
(b) 1% gain
(c) no profit no loss
(d) 2% loss
64. By selling a basket for Rs. 19.50, a shopkeeper gains 30%. For how much should he sell it to gain 40%?
(a) Rs. 21 (b) Rs. 21.50
(c) Rs. 24 (d) Rs. 23
65. A man purchased a bedsheet for Rs. 450 and sold it at a gain of 10% calculated on the selling price. The selling price of the bedsheets was
(a) Rs. 460 (b) Rs. 475
(c) Rs. 480 (d) Rs. 500

66. If an article is sold at 200% profit then the ratio of its cost price to its selling price will be
(a) 1 : 2 (b) 2 : 1
(c) 1 : 3 (d) 3 : 1

67. An article is sold at 5% profit. The ratio of selling price and cost price will be
(a) 1 : 5 (b) 20 : 21
(c) 21 : 20 (d) 5 : 1

68. By selling a bicycle for Rs. 2,850 a shopkeeper gain 14%. If the profit is reduced to 8%, then the selling price will be
(a) Rs. 2,600 (b) Rs. 2,700
(c) Rs. 2,800 (d) Rs. 3,000

69. By selling an article for Rs. 960 a man incurs a loss of 4%; what was the cost price ?
(a) Rs. 1,000 (b) Rs. 784
(c) Rs. 498.4 (d) Rs. 300

70. A fruit seller makes a profit of 20% by selling mangoes at a certain price. If he charges Rs. 1 more for each mango, he can make a profit of 40%. Find the selling price of a mango in the first case.
(a) Rs. 6 (b) Rs. 5
(c) Rs. 5.50 (d) Rs. 7

71. If a man were to sell his handcart for Rs. 720, he would loss 25%. To gain 25%, the selling price is
(a) Rs. 960 (b) Rs. 1,200
(c) Rs. 1,000 (d) Rs. 2,100

(SSC CHSL DEO & LDC Exam 21.10.2012)

72. A grocery dealer cheats to the extent of 10% while buying as well as selling by using false weight. What is his increase in the profit percentage?
(a) 20% (b) 21%
(c) 22% (d) None of these

(SSC CGL Tier I Exam 11.11.2012)

73. A book vendor sold a book at loss of 10%. Had he sold it for Rs. 108 more, he would have earned a profit of 10%. Find the cost of the book.
(a) Rs. 442 (b) Rs. 540
(c) Rs. 648 (d) Rs. 740

(SSC CGL Tier II Exam 16.09.2012)

74. Dinesh bought two radios for Rs. 1,920. he sold one at a profit of 20% and the other at a loss $6\frac{2}{3}\%$. If the selling price of both radios are same, then find the cost price of both radios.

- (a) Rs. 800 and Rs. 1,120
(b) Rs. 840 and Rs. 1,080
(c) Rs. 860 and Rs. 1,060
(d) Rs. 900 and Rs. 1,020

(SSC Const.(GD) Exam 24.04.2012)

75. The reduction of Rs. 12 in the selling price of an article will changes 5% gain into $2\frac{1}{2}\%$ loss. The cost price of the article is
(a) Rs. 140 (b) Rs. 160
(c) Rs. 80 (d) Rs. 100

(SSC CGL Pre Exam 17.03.2013)

76. An article was sold at a profit of 12%. If the cost price would be 10% less and selling price would be Rs. 5.75 more, there would be profit of 30%. Then at what price it should be sold to make a profit of 20% ?
(a) Rs. 115 (b) Rs. 120
(c) Rs. 138 (d) Rs. 215

(SSC CGL Tier I Exam 20.10.2013)

77. A radio dealer sold a radio at a loss of 2.5%. Had he sold it for Rs. 100 more. he would have gained $7\frac{1}{2}\%$. In order to gain $12\frac{1}{2}\%$ he should sell it for
(a) Rs. 1080 (b) Rs. 1125
(c) Rs. 850 (d) Rs. 925

(SSC MTS Exam 17.03.2013)

78. An article is sold at a gain of 15%. Had it been sold for Rs. 27 more. the profit would have been 20%. The cost price of the article is
(a) Rs. 500 (b) Rs. 700
(c) Rs. 540 (d) Rs. 545

(SSC CGL Tier II Exam 29.09.2013)

79. A businessman bought an article and sold it at a loss of 5%. If he had bought it for 10% less and sold it for Rs. 33 more, he would have had a profit of 30%. The cost price of the article is
(a) Rs. 330 (b) Rs. 155
(c) Rs. 150 (d) Rs. 300

(SSC MTS Exam 24.03.2013)

80. A shopkeeper sells an article at 15% gain. Had he sold it for Rs. 18 more, he would have gained 18%. The cost price (in Rs.) of the article is
(a) 540 (b) 318
(c) 600 (d) 350

(SSC CHSL DEO & LDC Ex. 10.11.2013)

81. A tradesman sold an article at a loss of 20%. If the selling price had been increased by Rs. 100, there would have been a gain of 5%. The cost price of the article (in Rs.) was
(a) 100 (b) 200
(c) 400 (d) 500

(SSC CGL Tier I Exam 19.05.2013)

82. There would be a 10% loss. if rice is sold at ₹ 54 per kg. To earn a profit of 20%, the price of rice per kg will be
(a) ₹ 72 (b) ₹ 70
(c) ₹ 63 (d) ₹ 65

(SSC CGL Mains 25-10-2015)

83. Pooja wants to sell a watch at a profit of 20%. She bought it at 10% less and sold it at ₹ 30 less, but still she gained 20%. The cost price of watch
(a) ₹ 240 (b) ₹ 250
(c) ₹ 220 (d) ₹ 225

(SSC CGL Mains 12-05-2015)

84. A profit of 12% is made when a mobile phone is sold at ₹ P and there is 4% loss when the phone is sold at ₹ Q. Then Q : P is
(a) 1 : 1 (b) 6 : 7
(c) 4 : 5 (d) 3 : 1

(SSC CGL Mains 12-05-2015)

85. An article is sold at a profit of 25%. If the selling price is doubled, the profit % will be:
(a) 200%
(b) 150%
(c) 100%
(d) 50%

(SSC LDC 15-11-2015, Morning)

86. A man purchased an article for ₹ 1500 and sold it at 25% above the cost price. If he has to pay ₹ 75 as tax on it his net profit percentage will be:
(a) 25% (b) 30%
(c) 15% (d) 20%

(SSC LDC 15-11-2015, Evening)

87. By selling some goods at ₹ 31, a salesman loses 7% on his output. Find the percentage profit or loss, when he sells the same at ₹ 35.
(a) Loss 7%
(b) Profit 5%
(c) Loss 5%
(d) Profit 7%

(SSC LDC 20-12-2015, Evening)

88. The marked price of an article is 10% higher than cost price. A discount of 10% is given on marked price. In this kind of sale, the seller bears:
 (a) no loss no gain
 (b) a loss of 5%
 (c) a gain of 1%
 (d) a loss of 1%
89. A dealer makes a profit of 20% even after giving a 10% discount on the advertised price of a scooter. If he makes a profit of Rs. 7500 on the sale of the scooter. the advertised price was
 (a) Rs. 45000 (b) Rs. 47500
 (c) Rs. 50000 (d) Rs. 52500
90. A shopkeeper earns a profit of 12% on selling a book at 10% discount on the printed price. The ratio of the cost price and the printed price of the book is
 (a) 99 : 125 (b) 25 : 37
 (c) 50 : 61 (d) 45 : 56
91. A tradesman allows a discount of 15% on the marked price. How much above the cost price must he mark his goods as to gain 19%?
 (a) 34% (b) 40%
 (c) 25% (d) 30%
92. Rita bought a television set with 20% discount on the labelled price. She made a profit of Rs. 800 by selling it for Rs. 16,800. The labelled price of the set was
 (a) Rs. 18,000 (b) Rs. 20,000
 (c) Rs. 20,800 (d) Rs. 24,000
93. The price of a shirt after 15% discount, is ₹ 119. What was the marked price of the shirt before discount
 (a) ₹ 129 (b) ₹ 140
 (c) ₹ 150 (d) ₹ 160
(SSC CGL Pre Exam 2016)
94. The cost price of an article is Rs. 800. After allowing a discount of 10%, a gain of 12.5% is made. Then the marked price of the article is
 (a) Rs. 1,000 (b) Rs. 1,100
 (c) Rs. 1,200 (d) Rs. 1,300
95. A shopkeeper allows 23% commission on his advertised price and still makes a profit of 10%. If he gains Rs. 56 on one item, his advertised price of the item, in Rs. is
 (a) 820 (b) 780
 (c) 790 (d) 800
96. The marked price of an article is 50% above cost price. When marked price is increased by 20% and selling price is increased by 20%, the profit become doubles. If original marked price is Rs. 300, then original selling price is
 (a) Rs. 200 (b) Rs. 250
 (c) Rs. 240 (d) Rs. 275
97. A fan is listed at Rs. 150 and a discount of 20% is given. Then the selling price is
 (a) Rs. 180 (b) Rs. 150
 (c) Rs. 120 (d) Rs. 110
(SSC CHSL DEO & LDC Exam 28.10.2012)
98. The cost of manufacture of a tape recorder is Rs. 1,500. The manufacturer fixes the marked price 20% above the cost of manufacture and allows a discount in such a way as to get a profit of 8%. The rate of discount is
 (a) 12 (b) 8
 (c) 20 (d) 10
(SSC CGL Tier I Exam 11.11.2012)
99. How much percent above the cost price should a shopkeeper marks his goods so as to earn a profit of 32% after allowing a discount of 12% on the marked price ?
 (a) 50% (b) 40%
 (c) 60% (d) 45%
(SSC CGL Tier I Exam 11.11.2012)
100. A dealer purchased a washing machine for Rs. 7,660. After allowing a discount of 12% on its marked price, he still gains 10%. Find the marked price of the washing machine.
 (a) Rs. 9,575 (b) Rs. 8,426
 (c) Rs. 8,246 (d) Rs. 9,755
(SSC Assistant Grade III Exam 11.11.2012)
101. A publisher printed 2000 copies of a book at a cost of Rs. 70,000. He distributes 400 copies free as specimen copies. He gave 30% discount on marked price of each book which is Rs. 75. What is his gain or loss percent age ?
 (a) 20% gain (b) 20% loss
 (c) 10% loss (d) 10% gain
(SSC CHSL DEO & LDC Exam 04.11.2012)
102. While selling to the retailer, a company allows 30% discount on the marked price of their products. If the retailer sells those products at marked price, his profit % will be:
 (a) 30% (b) $\frac{17}{2}\%$
 (c) 40% (d) $42\frac{6}{7}\%$
(SSC MTS Exam 10.03.2013)
103. A trader marked the price of a commodity so as to include a profit of 25%, but allow a discount of 16% on the marked price. His actual profit will be
 (a) 16% (b) 25%
 (c) 5% (d) 9%
(SSC CGL Tier I Exam 21.04.2013)
104. If a shirt cost Rs. 64, after 20% discount is allowed, what was its original price in Rs.?
 (a) 76.80 (b) 80
 (c) 88 (d) 86.80
(SSC Constable (GD) Exam 12.05.2013)
105. A got 30% concession on the label price of an article and sold for Rs. 8,750 with 25% profit on the price he bought. The label price was
 (a) Rs. 13,000 (b) Rs. 16,000
 (c) Rs. 12,000 (d) Rs. 10,000
(SSC CHSL DEO & LDC Exam 20.10.2013)
106. A shopkeeper marks his goods 15% above cost price, but allows 20% discount for cash. His net loss is
 (a) 3% (b) 5%
 (c) 8% (d) 10%
(SSC CGL Tier I Exam 19.05.2013)
107. A shopkeeper sold sarees at Rs. 266 each after giving 5% discount on labelled price. Had he not given the discount, he would have earned a profit of 12% on the cost price. What was the cost price of each saree?
 (a) Rs. 280 (b) Rs. 260
 (c) Rs. 240 (d) Rs. 250
(SSC MTS Exam 17.03.2013)
108. Arvind purchased a wrist watch with 30% discount on the labelled price. He sold it with 40% profit on the price he bought. What was his percent loss on the labelled price?
 (a) 2 (b) 6
 (c) 4 (d) 8
(SSC CGL Tier I Exam 21.04.2013)

109. A trader allows a discount of 10% on the marked price. He still has a profit of 17% on the cost price. Find the profit percentage if he sells at the marked price.

- (a) 27% (b) 33%
(c) 30% (d) 19%

(SSC CPO SI Exam 10.11.2013)

110. A tradesman marks his goods 30% more than the cost price.

If he allows a discount of $6\frac{1}{4}\%$ then his gain percent is

- (a) $23\frac{3}{4}\%$ (b) 22%
(c) $21\frac{7}{8}\%$ (d) 30%

(SSC CGL Tier II Exam 29.09.2013)

111. A retailer purchased radiosets at the rate of Rs. 400 each from a wholesaler. He raised the price by 30% and then allowed a discount of 8% on each set. His profit will be

- (a) 19% (b) 78.4%
(c) 22% (d) 19.6%

(SSC CGL Tier I Exam 21.04.2013)

112. An article which is marked at ₹ 975 is sold for ₹ 897. The % discount is?

- (a) 12% (b) 10%
(c) 6% (d) 8%

(SSC CGL 16-08-2015, Morning)

113. The difference between successive discounts of 40% followed by 30% and 45% followed by 20% on the marked price of an article is ₹ 12. The marked price of the article is:

- (a) ₹ 400 (b) ₹ 800
(c) ₹ 600 (d) ₹ 200

(SSC CGL 16-08-2015, Morning)

114. A dealer buys an article listed at ₹ 100 and gets successive discounts of 10% and 20%. He spends 10% of the Cost Price on transportation. At what price should he sell the article to earn a profit of 15%?

- (a) ₹ 90.80 (b) ₹ 92.00
(c) ₹ 91.20 (d) ₹ 91.08

(SSC CGL 16-08-2015, Evening)

115. A shopkeeper allows a discount of 10% on the marked price of a camera. Marked price of the camera, which cost him ₹ 600, to make a profit of 20% should be:

- (a) ₹ 800 (b) ₹ 650
(c) ₹ 750 (d) ₹ 700

(SSC CGL 16-08-2015, Evening)

116. 10% discount and then 20% discount in succession is equivalent to total discount of

- (a) 15% (b) 30%
(c) 24% (d) 28%

(SSC CGL 09-08-2015, Morning)

117. The marked price of a watch was ₹ 720. A man bought the same for ₹ 550.80 after getting two successive discounts, the first being 10%. then second discount rate is

- (a) 12% (b) 14%
(c) 15% (d) 18%

(SSC CGL 09-08-2015, Morning)

118. Allowing 20% and 15% successive discounts, the selling price of an article becomes ₹ 3,060; then the marked price will be:

- (a) ₹ 4,400 (b) ₹ 5,000
(c) ₹ 4,500 (d) ₹ 4,000

(SSC CGL 09-08-2015, Morning)

119. List price of a book is ₹ 100. A dealer sells three such books for ₹ 274.50 after allowing discount at a certain rate. find the rate of discount.

- (a) 8.33% (b) 8.16%
(c) 8.5% (d) 8.34%

(SSC CGL 09-08-2015, Evening)

120. An article was sold at Rs. 950 allowing 5% discount on the marked price. The marked price of the article is:

- (a) Rs. 960 (b) Rs. 1000
(c) Rs. 955 (d) Rs. 945

(SSC CGL Pre Exam 2016)

121. A trader marks his goods 20% above cost price but allows his customers a discount of 10%, the cost price of a goods, which is sold for ₹ 216, is:

- (a) ₹ 108 (b) ₹ 180
(c) ₹ 196 (d) ₹ 200

(SSC CPO 21-06-2015, Morning)

122. If the cost price of an item is $\frac{5}{9}$ of its marked price and the profit is 20%, then the percentage of discount is

- (a) 20% (b) $63\frac{1}{3}\%$
(c) $70\frac{1}{3}\%$ (d) $33\frac{1}{3}\%$

(SSC CPO 21-06-2015, Evening)

123. If a shopkeeper wants to give 20% discount on cost price of a toy, he has to sell it for ₹ 300. If he sells it at ₹ 405, then his gain percent is

- (a) 5% (b) 8%
(c) 6% (d) 4%

(SSC CGL Mains 25-10-2015)

124. A dealer fixed the price of an article 40% above the cost of production. While selling it he allows a discount of 20% and makes a profit of ₹ 48. The cost of production (in ₹) of the article is

- (a) 320 (b) 400
(c) 420 (d) 360

(SSC CGL Mains 25-10-2015)

125. A manufacturer fixes his selling price at $33\frac{1}{3}\%$ over the

cost of production. If cost of production goes up by 12% and manufacturer raises his selling price by 10%, his percentage profit is

- (a) $36\frac{5}{9}\%$ (b) $30\frac{20}{21}\%$
(c) 35% (d) $28\frac{3}{8}\%$

(SSC CGL Mains 25-10-2015)

126. The marked price of a CD is ₹250. It is sold for ₹225. The rate of discount is:

- (a) $11\frac{1}{9}\%$ (b) 25%
(c) 2.5% (d) 10%

(SSC LDC 06-12-2015, Morning)

127. Mohan purchased a bag with 20 percent discount on the labelled price. He sold it with 40 percent profit on the price he bought. The percentage of profit on the labelled price is:

- (a) 20% (b) 24%
(c) 12% (d) 18%

(SSC LDC 06-12-2015, Morning)

128. A house was sold for ₹ y by giving a discount of x%, then the list price was:

- (a) $\frac{100y}{1 - \frac{x}{100}}$ (b) $\frac{100x}{100 - y}$
(c) $\frac{100y}{100 - x}$ (d) $\frac{100x}{100 - x}$

(SSC LDC 06-12-2015, Evening)

129. Successive discount of 10%, 20% and 25% on the price of an article will reduce the price by:

- (a) 46% (b) 54%
(c) 45% (d) 55%

(SSC LDC 20-12-2015, Evening)

130. How much percentage above the cost price should a shopkeeper mark on his goods so that after allowing a discount of 10% he should gain 26%?

- (a) 140% (b) 25%
(c) 16% (d) 40%

(SSC LDC 20-12-2015, Evening)

131. A sells a bicycle to B at a profit of 20%. B sells it to C at a profit of 25%. If C pays Rs. 225/- for it, the cost price of the bicycle for A is:

- (a) Rs. 110/- (b) Rs. 125/-
(c) Rs. 120/- (d) Rs. 150/-

132. A house worth Rs. 1,50,000 is sold by X at a 5% profit to Y, Y sells the house back to X at a 2% loss. Then find profit and loss in the entire transaction.

- (a) X gains Rs. 4,350
(b) X loses Rs. 4,350
(c) X gains Rs. 3,150
(d) X loses Rs. 3,150

133. If a manufacturer gains 10 percent, wholesaler 15 percent and retailer 25 percent, then the production cost of an article, whose retail price is Rs. 1,265, is

- (a) Rs. 700 (b) Rs. 750
(c) Rs. 800 (d) Rs. 900

134. Krishna bought a camera and paid 20% less than its original price. He sold it at 40% profit on the price he had paid. The percentage of profit earned by Krishna on the original price was

- (a) 22 (b) 32
(c) 12 (d) 15

135. A manufacturer sells an article to a wholesale dealer at a profit of 10%. The wholesale dealer sells it to a shopkeeper at 20% profit. The shopkeeper sells it to a customer for Rs. 56,100 at a loss of 15%. Then the cost price of the article to the manufacturer is

- (a) Rs. 25,000 (b) Rs. 10,000
(c) Rs. 50,000 (d) Rs. 55,000

(SSC CGL Tier II Exam 16.09.2012)

136. A sells a cycle to B at a profit of 10%, B sells to C at a profit of 20%. If C pays Rs. 264 for it, how much did A pay for it?

- (a) Rs. 200 (b) Rs. 220
(c) Rs. 225 (d) Rs. 234

(SSC CHSL DEO & LDC Exam 04.11.2012)

137. A sold a tape-recorder to B for Rs. 4,860 at a loss of 19%. Again B sold it to C at price that would give A a profit of 17%. The gain of B is

- (a) $22\frac{2}{9}\%$ (b) $33\frac{1}{3}\%$
(c) $44\frac{4}{9}\%$ (d) $66\frac{2}{3}\%$

(SSC Assistant Grade III Exam 11.11.2012)

138. A dishonest fruit vendor sells his goods at cost price but they use a weight of 900 gm for the 1 kg. weight. His gain percent is:

- (a) 12% (b) $11\frac{1}{9}\%$
(c) $10\frac{1}{9}\%$ (d) 10%

(SSC CHSL DEO & LDC Exam 1.10.2012)

139. A dishonest shopkeeper, using a faulty balance makes a profit of 5% while buying as well as while selling his goods. His actual gain percent in the whole process amounts to

- (a) 11 (b) 10
(c) 10.25 (d) 10.5

(SSC MTS Exam 17.03.2013)

140. A man sells a car to his friend at 10% loss. If the friend sells it for Rs. 54,000 and gains 20%, the original cost price of the car was

- (a) Rs. 25,000 (b) Rs. 35,000
(c) Rs. 45,000 (d) Rs. 50,000

(SSC MTS Exam 24.03.2013)

141. A sells a suitcase to B at 10% profit. If B pays Rs. 2,860 for it, then the price at which A bought is

- (a) Rs. 1,000 (b) Rs. 1,600
(c) Rs. 26,00 (d) Rs. 2,500

(SSC CGL Tier II Exam 29.09.2013)

142. A sells a cycle to B at a profit of 20% and B sells it to C at a loss of 25%. If C bought the cycle for ₹ P, then the cost price of it for A was

- (a) ₹ $\frac{1}{20}$ P (b) ₹ $\frac{9}{20}$ P

- (c) ₹ $\frac{9}{10}$ P (d) ₹ $\frac{10}{9}$ P

(SSC CGL Mains 12-05-2015)

143. A man buys a cycle for Rs. 1400 and sells it at a loss of 15%. What is the selling price of the cycle?

- (a) Rs. 1202 (b) Rs. 1190
(c) Rs. 1160 (d) Rs. 1000

144. On selling an article for Rs. 651, there is a loss of 7%. The cost price of that article is

- (a) Rs. 744 (b) Rs. 751
(c) Rs. 793 (d) Rs. 700

145. Find the selling price of an article if a shopkeeper allows two successive discounts of 5% each on the marked price of Rs. 80

- (a) Rs. 70.20 (b) Rs. 70.10
(c) Rs. 72.00 (d) Rs. 72.20

146. A saleable article passes successively in the hands of three traders. Each trader sold it further at a gain of 25% of the cost price. If the last trader sold it for Rs. 250 then what was the cost price for the first trader?

- (a) Rs. 128 (b) Rs. 150
(c) Rs. 192 (d) Rs. 200

147. A reduction of 20% in the price of salt enabled a purchaser to obtain 4 kg. more for Rs. 100. The reduced price of salt per kg is:

- (a) Rs. 4 (b) Rs. 5
(c) Rs. 6.25 (d) Rs. 6.50

148. Joseph's salary is reduced by 10%. In order to have his salary back to his original amount, it must be raised by

- (a) 12.5% (b) $11\frac{1}{9}\%$
(c) 10% (d) 11%

149. The price of an article is cut by 10%. To restore it to former value, the new price must be increased by

- (a) 10% (b) 9%
(c) $11\frac{1}{9}\%$ (d) 11%

150. An increase of 20% in the price of mangoes enables a person to purchase 4 mangoes less for Rs. 40. The price of 15 mangoes before increase was

- (a) Rs. 10 (b) Rs. 15
(c) Rs. 20 (d) Rs. 25

151. A reduction of 20% in the price of sugar enables me to purchase 5 kg more for Rs. 600. Find the price of sugar per kg before reduction of price.

- (a) Rs. 24 (b) Rs. 30
(c) Rs. 32 (d) Rs. 36

152. A shopkeeper gains 20% while buying the goods and 30% while selling them. Find his total gain per cent.

- (a) 50% (b) 36%
(c) 56% (d) 40%

153. The list price of an article is Rs. 900. It is available at two successive discounts of 20% and 10%. The selling price of the article is:

- (a) Rs. 640 (b) Rs. 648
(c) Rs. 540 (d) Rs. 548

(SSC CGL Pre Exam 2016)

154. A dishonest grocer sells rice at a profit of 10% and also uses weights which are 20% less than the marked weight. The total gain earned by him will be

- (a) 37.5% (b) 32%
(c) 30.5% (d) 35%

(SSC MTS Exam 17.03.2013)

155. A dishonest dealer professes to sell his goods at the cost price but uses a false weight of 850 g instead of 1 kg. his gain per cent is

- (a) $17\frac{12}{17}\%$ (b) $17\frac{11}{17}\%$
(c) $71\frac{11}{17}\%$ (d) $11\frac{11}{17}\%$

(SSC CGL Tier I Exam 19.05.2013)

156. A man bought two goats for Rs. 1008. He sold one at a loss of 20% and other at a profit of 44% if each goat was sold for the same price the cost price of the goat which was sold at loss, was:

- (a) Rs. 648 (b) Rs. 360
(c) Rs. 568 (d) Rs. 440

157. One trader calculates the percentage of profit on the buying price and another calculates on the selling price. When their selling prices are the same, then the difference of their actual profits is Rs. 85 and both claim to have made 20% profit, what is the selling price of each?

- (a) Rs. 1700 (b) Rs. 2100
(c) Rs. 2550 (d) Rs. 2750

158. A trader bought two horses for Rs. 19,500. he sold one at a loss of 20% and the other at a profit of 15%. If the selling price of each horse is the same, then their cost prices are respectively.

- (a) Rs. 10,000 and Rs. 9,500
(b) Rs. 11,500 and Rs. 8,000
(c) Rs. 12,000 and Rs. 7,500
(d) Rs. 10,500 and Rs. 9,000

159. X sells two articles for Rs. 4,000 each with no loss and no gain in the transaction. If one was sold at a gain of 25% the other is sold at a loss of

- (a) 25% (b) $18\frac{2}{9}\%$
(c) $16\frac{2}{3}\%$ (d) 20%

160. A man purchases two fans for Rs. 2,160. By selling one fan at a profit of 15% and the other at a loss of 9% he neither gains nor loss in the whole transaction. Find the cost price of each fan in Rs.

- (a) 710,1450 (b) 1530,630
(c) 810,1350 (d) 1340,820

(SSC CGL Tier I Exam 11.11.2012)

161. If I would have purchased 11 articles for Rs. 10 and sold all the articles at the rate of 10 for Rs. 11, the profit percent would have been:

- (a) 10% (b) 11%
(c) 21% (d) 100%

162. A person buys some pencils at 5 for a rupee and sells them at 3 for a rupee. His gain per cent will be:

- (a) $66\frac{2}{3}\%$ (b) $76\frac{2}{3}\%$
(c) $56\frac{2}{3}\%$ (d) $46\frac{2}{3}\%$

163. 100 oranges are bought for Rs. 350 and sold at the rate of Rs. 48 per dozen. The percentage of profit or loss is :

- (a) 15% loss (b) 15% gain
(c) $14\frac{2}{7}\%$ loss (d) $14\frac{2}{7}\%$ profit

164. Oranges are bought at the rate of 10 for Rs. 25 and sold at the rate of 9 for Rs. 25. The profit is

- (a) $9\frac{1}{11}\%$ (b) 10%
(c) $11\frac{1}{9}\%$ (d) $12\frac{1}{2}\%$

165. A person bought some articles at the rate of 5 per rupee and the same number at the rate of 4 per rupee. He mixed both the types and sold at the rate of 9 for 2 rupees. In this business he suffered a loss of Rs. 3. The total number of articles bought by him was

- (a) 1090 (b) 1080
(c) 540 (d) 545

166. Ravi buys some toffees at 2 for a rupee and sells them at 5 for a rupee. His loss percent is

- (a) 120 (b) 90
(c) 30 (d) 60

167. Some toffees were bought at the rate of 11 for Rs. 10 and the same number at the rate of 9 for Rs. 10. If the whole toffees was sold at one rupee per toffee, then the gain or loss in the whole transaction was

- (a) loss of 1%
(b) gain of 1%
(c) neither gain nor loss
(d) gain of 1.5%

168. A man buys a certain number of oranges at 20 for Rs. 60 and an equal number at 30 for Rs. 60. He mixes them and sells them at 25 for Rs. 60. What is gain or loss per cent ?

- (a) Gain of 4%
(b) Loss of 4%
(c) Neither gain nor loss
(d) Loss of 5%

169. If the total cost of 73 articles having equal cost is Rs. 5,110 and the total selling price of 89 such articles is Rs. 5,607, then in the transaction, there will be

- (a) a loss of 15%
(b) a gain of 10%
(c) a loss of 10%
(d) a gain of 15%

170. A man purchased some eggs at 3 for Rs. 5 and sold them at 5 for Rs. 12. Thus he gained Rs. 143 in all. the number of eggs he bought is

- (a) 210 (b) 200
(c) 195 (d) 190

171. A man bought oranges at the rate of 8 for Rs. 34 and sold them at the rate of 12 for Rs. 57. How many oranges should be sold to earn a net profit of Rs. 45?

- (a) 90 (b) 100
(c) 135 (d) 150

172. A shopman bought pens at the rate of 7 for Rs. 10 and sold them at a profit of 40%. How many pens would a customer get for Rs. 10?

- (a) 6 (b) 4
(c) 5 (d) 3

173. Krishan purchased a number of articles at Rs. 10 for each and the same number for Rs. 14 each. he mixed them together and sold them for Rs. 13 each. Then his gain or loss percent is

- (a) Loss $8\frac{1}{3}\%$ (b) Gain $8\frac{2}{3}\%$
(c) Loss $8\frac{2}{3}\%$ (d) Gain $8\frac{1}{3}\%$

174. A man purchases some oranges at the rate of 3 for Rs. 40 and the same quantity at 5 for Rs. 60. If he sells all the oranges at the rate of 3 for Rs. 50, find his gain or loss percent (to the nearest integer).

- (a) 34% loss (b) 31% profit
(c) 31% loss (d) 32% profit

(SSC CGL Mains 25-10-2015)

175. The price of coal is increased by 20%, By what per cent a family should decrease its consumption so that expenditure remains same?

- (a) 40% (b) $46\frac{2}{3}\%$
(c) 20% (d) $16\frac{2}{3}\%$

176. Nikita bought 30 kg of wheat at the rate of Rs. 9.50 per kg of wheat and the same amount of wheat at the rate of Rs. 8.50 per kg and mixed them. She sold the mixture at the rate of Rs. 8.90 per kg. Her total profit or loss in the transaction was:

- (a) Rs. 2 loss (b) Rs. 2 profit
(c) Rs. 6 loss (d) Rs. 6 profit

177. Nita blends two varieties of tea one costing Rs. 180 per kg and another costing Rs. 200 per kg in the ratio 5 : 3. If she sells the blended variety at Rs. 210 per kg. then her gain is

- (a) 110 per cent
(b) 11 per cent
(c) 12 per cent
(d) 13 per cent

178. A shopkeeper bought 80 kg of sugar at the rate of Rs. 13.50 per kg. He mixed it with 120 kg of sugar costing Rs. 16 per kg in order to make a profit of 20%, he must sell the mixture at

- (a) Rs. 18 per kg
(b) Rs. 17 per kg
(c) Rs. 16.40 per kg
(d) Rs. 15 per kg

179. To gain 10% on selling the mixture of milk and water at the cost price of pure milk. the quantity of water to be mixed with 50 kg of pure milk is

- (a) 2.5 kg (b) 5 kg
(c) 7.5 kg (d) 10 kg

180. A milkman bought 70 litres of milk for Rs. 630 and added 5 litres of water. If he sells it at Rs. 9.00 per litre, his profit percentage is

- (a) $8\frac{1}{5}\%$ (b) 7%
(c) $8\frac{2}{5}\%$ (d) $7\frac{1}{7}\%$

181. A milkman makes 20% profit by selling milk mixed with water at Rs. 9 per litre. If the cost price of 1 litre pure milk is Rs. 10, then the ratio of milk and water in the said mixture is

- (a) 3 : 1 (b) 4 : 1
(c) 3 : 2 (d) 4 : 3

(SSC CHSL DEO & LDC Exam 28.10.2012)

182. A shopkeeper bought 15 kg of rice at the rate of Rs. 29 per kg and 25 kg of rice at the rate of Rs. 20 per kg. He sold the mixture of both types of rice at the rate of Rs. 27 per kg. His profit in this transaction is

- (a) Rs. 125 (b) Rs. 150
(c) Rs. 140 (d) Rs. 145

(SSC CHSL DEO & LDC Exam 8.10.2012)

183. Two blends of a commodity costing ₹ 35 and ₹ 40 per kg respectively are mixed in the ratio 2 : 3 by weight. If one-fifth of the mixture is sold at ₹ 46 per kg and the remaining at the rate ₹ 55 per kg, the profit percent is

- (a) 50 (b) 20
(c) 40 (d) 30

(SSC CGL Mains 25-10-2015)

184. A milkman mixed the water with milk to gain 25% by selling the mixture at cost price. The ratio of water and milk is:

- (a) 5 : 4 (b) 1 : 5
(c) 4 : 5 (d) 1 : 4

(SSC LDC 15-11-2015, Morning)

185. On selling 17 balls at Rs. 720 there is a loss equal to the cost price of 5 balls. The cost price of a ball is:

- (a) Rs. 45 (b) Rs. 50
(c) Rs. 60 (d) Rs. 55

186. Mohan bought 25 books for Rs. 2,000 and sold them at a profit equal to the selling price of 5 books. The selling price of 1 book is:

- (a) Rs. 100 (b) Rs. 120
(c) Rs. 150 (d) Rs. 200

187. By selling 144 hens Mahesh suffered a loss equal to the selling price of 96 hens. His loss per cent is

- (a) 40 (b) 30
(c) 50 (d) 41

188. By selling 100 pencils, a shopkeeper gains the selling price of 20 pencils. His gain per cent is

- (a) 25 (b) 20
(c) 15 (d) 12

189. By selling 33 metres of cloth a person gains the cost price of 11 metres. Find his gain%

- (a) $33\frac{1}{3}\%$ (b) $33\frac{1}{2}\%$
(c) 33% (d) $34\frac{1}{3}\%$

(SSC CHSL DEO & LDC Exam 28.10.2012)

190. A cloth merchant on selling 33 metres of cloth obtains a profit equal to the selling price of 11 metres of cloth. The profit is

- (a) 40% (b) 22%
(c) 50% (d) 11%

(SSC CHSL DEO & LDC Exam 10.11.2013)

191. An item costing Rs. 840 was sold by a shopkeeper at a gain of 10% and it was again sold by the new buyer at a loss of 5%. Find selling price of the item is:

- (a) Rs. 877.80 (b) Rs. 798
(c) Rs. 924 (d) Rs. 37.80

192. By selling an article at $\frac{2}{3}$ of the marked price, there is a loss of 10%. The profit percent, when the article is sold at the marked price is

- (a) 20% (b) 30%
(c) 35% (d) 40%

193. A merchant fixes the sale price of his goods at 15% above the cost price. He sells his goods at 12% less than the fixed price. His percentage of profit is:
- (a) $2\frac{1}{2}$ (b) $1\frac{1}{5}$
(c) $1\frac{1}{2}$ (d) 2
194. A person sells an article for Rs. 75 and gains as much per cent as the cost price of the article in rupees. The cost price of the article is
- (a) Rs. 37.50 (b) Rs. 40
(c) Rs. 50 (d) Rs. 150
195. I purchased 120 exercise books at the rate of Rs. 3 each and sold $\frac{1}{3}$ of them at the rate of Rs. 4 each, $\frac{1}{2}$ of them at the rate of Rs. 5 each and the rest at the cost price. My profit per cent was
- (a) 44% (b) $44\frac{4}{9}\%$
(c) $44\frac{2}{3}\%$ (d) 45%
196. A merchant buys an article for Rs. 27 and sells it at a profit of 10% of the selling price. The selling price of the article is :
- (a) Rs. 29.70 (b) Rs. 30
(c) Rs. 37 (d) Rs. 32
197. A clock was sold for Rs. 144. If the percentage of profit was numerically equal to the cost price the cost of the clock was
- (a) Rs. 72 (b) Rs. 80
(c) Rs. 90 (d) Rs. 100
198. If the price of eraser is reduced by 25%. A person can buy 2 more erasers for a rupee. How many erasers are available for a rupee after reduction ?
- (a) 8 (b) 6
(c) 4 (d) 2
199. Raghavan purchased a scooter at $\frac{13}{15}$ of its selling price and sold it at 12% more than its selling price. His gain is.
- (a) 20% (b) 30%
(c) $38\frac{1}{13}\%$ (d) $29\frac{3}{13}\%$
200. By what percent must the cost price be raised in fixing the sale price in order that there may be a profit of 20% after allowing a commission of 10% ?
- (a) 25 (b) $133\frac{1}{3}$
(c) $33\frac{1}{3}$ (d) 30
201. Two-third of a consignment was sold at a profit of 5% and the remainder at a loss of 2%. If the total profit was Rs. 400. then the value of the consignment was
- (a) Rs. 15,000 (b) Rs. 15,500
(c) Rs. 16,000 (d) Rs. 16,500
202. A man buys a field of agricultural land for Rs. 3,60,000. He sells two-fifths at a gain of 25%. At what price must he sell the remaining field so as to make an overall profit of 10%?
- (a) Rs. 1,00,000 (b) Rs. 1,15,000
(c) Rs. 2,16,000 (d) Rs. 1,25,000
203. A dealer sold $\frac{3}{4}$ of his articles at a gain of 20% and the remaining at cost price. The gain per cent earned by him in the whole transaction is
- (a) 13 (b) 14
(c) 15 (d) 16
204. A man buys some articles at Rs. P per dozen and sells them at Rs. $\frac{P}{8}$ per piece. His profit per cent is
- (a) 30 (b) 40
(c) 50 (d) 60
205. By selling an article, a man makes a profit of 25% of its selling price. His profit percent is
- (a) 20 (b) 25
(c) $16\frac{2}{3}$ (d) $33\frac{1}{3}$
206. If there is a profit of 20% on the cost price of an article, the percentage of profit calculated on its selling price will be
- (a) 24 (b) $16\frac{2}{3}$
(c) $8\frac{1}{3}$ (d) 20
207. A cloth merchant sold half of his cloth at 20% profit, half of the remaining cloth at 20% loss and the rest was sold at its cost price. In the total transaction, his gain or loss will be
- (a) 5% profit
(b) Neither loss nor gain
(c) 5% loss
(d) 10% profit
208. A man bought 20 dozen eggs for Rs. 720. What should be the selling price of each egg if he wants to make a profit of 20%?
- (a) Rs. 3.25 (b) Rs. 3.30
(c) Rs. 3.50 (d) Rs. 3.60
209. A vendor sells lemons at the rate of 5 for Rs. 14. gaining thereby 40%. For how much did he buy a dozen lemons?
- (a) Rs. 20 (b) Rs. 21
(c) Rs. 24 (d) Rs. 28
210. Mahesh purchased a radio at $\frac{9}{10}$ of its selling price and sold it at 8% more than its original selling price. His gain percent is:
- (a) 20% (b) 18%
(c) 10% (d) 8%
211. Richa purchased an article at $\frac{4}{5}$ of its list price and sold it at 20% more than the list price. Richa's profit percent was
- (a) 50 (b) 40
(c) 30 (d) 25
212. The difference between the selling price of an article at a profit of 15% and at a profit of 10% is Rs. 10. The cost price of the article is
- (a) Rs. 100 (b) Rs. 120
(c) Rs. 150 (d) Rs. 200
213. The difference between the selling price and cost price of an article is Rs. 210. If the profit per cent is 25, then the selling price of the article is
- (a) Rs. 950 (b) Rs. 1,050
(c) Rs. 1,150 (d) Rs. 1,250
214. If selling price of an article is reduced by 60%, then there is a loss of 10% on cost price. The initial profit percent was
- (a) 70 (b) 80
(c) 100 (d) 125

215. If the cost price is 95% of the selling price, what is the profit percent?

- (a) 4 (b) 4.75
(c) 5 (d) 5.26

216. If the cost price is 90% of the selling price, what is the profit percent?

- (a) 4 (b) 4.75
(c) 5 (d) $11\frac{1}{9}$

217. When the price of cloth was reduced by 25%, the quantity of cloth consumption increased by 20% what was the effect on gross receipt of the shop?

- (a) 5% increase
(b) 5% decrease
(c) 10% increase
(d) 10% decrease

218. An item when sold for Rs. 1,690 earned 30% profit on the cost price. Then the cost price is

- (a) Rs. 507 (b) Rs. 630
(c) Rs. 1,300 (d) Rs. 130

(SSC FCI Asst. Grade III Exam 11.11.2012)

219. A sells an article to B making a profit of $\frac{1}{5}$ of his outlay. B sells it to C, gaining 20%. If C sells it for Rs. 600 and incurs a loss of $\frac{1}{6}$ of his outlay, the cost price of A is

- (a) Rs. 600 (b) Rs. 500
(c) Rs. 720 (d) Rs. 800

(SSC CGL Tier II Exam 16.09.2012)

220. A bought an article, paying 5% less than the original price. A sold it with 20% profit on the price he had paid. What percent of profit did A earn on the original price?

- (a) 10 (b) 13
(c) 14 (d) $\frac{17}{2}$

(SSC CHSL DEO & LDC Exam 4.11.2012)

221. Two items A and B are sold at a profit of 10% and 15% respectively. If the amount of profit received is the same, then the cost price of A and B may be

- (a) Rs. 1,000, Rs. 1,500
(b) Rs. 5,000, Rs. 2,000
(c) Rs. 3,000, Rs. 2,000
(d) Rs. 3,000, Rs. 5,000

(SSC CGL Tier II Exam 29.09.2012)

222. A shopkeeper sold his goods at half the list price and thus lost 20%. If he had sold on the listed price, his gain percentage would be

- (a) 60% (b) 72%
(c) 20% (d) 35%

(SSC CGL Mains 12-05-2015)

223. A man buys a toy for ₹ 25 and sells it for ₹ 30. His gain percent is

- (a) 20% (b) 10%
(c) 5% (d) 2.5%

(SSC CGL Mains 12-05-2015)

224. A dealer sold an article at 6% loss. Had he sold it for Rs. 64 more, he would have made a profit of 10%. Then the cost of the article is

- (a) 400 (b) 200
(c) 164 (d) 464

(SSC CGL Pre Exam 2016)

225. A merchant finds his profit as 20% of the selling price. His actual profit is

- (a) 20% (b) 22%
(c) 25% (d) 30%

226. Oranges are bought at 7 for Rs. 3. At what rate per hundred must they be sold to gain 33%?

- (a) Rs. 56 (b) Rs. 60
(c) Rs. 58 (d) Rs. 57

227. A loss of 20% is incurred when 6 articles are sold for a rupee. To gain 20% how many articles should be sold for a rupee?

- (a) 1 (b) 2
(c) 3 (d) 4

228. By selling 12 oranges for Rs. 60, a man losses 25%. The number of oranges he has to sell for Rs. 100, so as to gain 25% is

- (a) 10 (b) 11
(c) 12 (d) 15

229. By selling 4 articles for 1 rupee, a man losses 4%. Had he sold three articles per rupee, the profit would have been:

- (a) 30% (b) 28%
(c) 16% (d) 12%

(SSC CHSL DEO & LDC Exam 20.10.2013)

230. By selling 80 ball pens for Rs. 140 a retailer losses 30%. How many ball pens should he sell for Rs. 104 so as to make a profit of 30%?

- (a) 32 (b) 52
(c) 48 (d) 42

(SSC MTS Exam 20.04.2012)

231. A vendor loses the selling price of 4 oranges on selling 36 oranges. His loss percent is

- (a) $12\frac{1}{2}\%$ (b) 9%
(c) 10% (d) $12\frac{1}{2}\%$

(SSC CHSL DEO & LDC Exam 10.11.2013)

232. If bananas are bought at the rate of 4 for a rupee, how many must be sold for a rupee so as to gain $33\frac{1}{3}\%$.

- (a) 4 (b) 3
(c) 2.5 (d) 2

(SSC LDC 15-11-2015, Morning)

233. By selling 12 kg of potatoes for 63, a shopkeeper gains 5%. What does his gain or loss percent by selling 50 kg of the same potatoes for 247.50?

- (a) 1% profit
(b) 1% loss
(c) No profit no loss
(d) 2.5% profit

(SSC LDC 20-12-2015, Morning)

234. By selling 14 watches of equal cost price at the rate of Rs. 450 each, there is a profit equal to the cost price of 4 watches. The cost price of a watch is

- (a) Rs. 350 (b) Rs. 360
(c) Rs. 375 (d) Rs. 400

235. If by selling an article for ₹ 390 a shopkeeper gains 20%, then the cost is

- (a) ₹ 370 (b) ₹ 325
(c) ₹ 350 (d) ₹ 300

(SSC CGL Pre Exam 2016)

236. A man buys 12 articles for Rs. 12/- and sells them at the rate of Rs. 1.25 per article. His gain percentage is:

- (a) 20 (b) 25
(c) 15 (d) 18

237. A trader bought 10 kg of apples for Rs. 405 out of which 1 kg of apples were found to be rotten. If he wishes to make a profit of 10% at what rate should he sell the remaining apples per kg?

- (a) 49.5 (b) 48
(c) 46 (d) 47

238. 12 copies of a book were sold for Rs. 1800/- there by gaining cost price of 3 copies. The cost price of a copy is:

- (a) Rs. 120/- (b) Rs. 150/-
(c) Rs. 1200/- (d) Rs. 1500/-

239. A book-seller bought 200 text-books for Rs. 12,000. He wanted to sell them at a profit so that he got 20 books free. At what profit percent should he sell them?

- (a) 10 (b) 11
(c) 11.5 (d) 12

240. If the sales tax be reduced from $3\frac{1}{2}\%$ to $3\frac{1}{3}\%$, what difference does it make to person who purchases an article whose marked price is Rs. 8,400?

- (a) Rs. 20 (b) Rs. 15
(c) Rs. 14 (d) Rs. 10

241. In terms of percentage profit which is the best transaction ?

C. P. (in Rs.) Profit (in Rs.)

- | | |
|----------|----|
| (I) 36 | 17 |
| (II) 50 | 24 |
| (III) 40 | 19 |
| (IV) 60 | 29 |

- (a) I (b) II
(c) III (d) IV

242. A man bought an old typewriter for Rs. 1200 and spent Rs. 200 on its repair. He sold it for Rs. 1680. His profit per cent is:

- (a) 20% (b) 10%
(c) 8% (d) 16%

243. The cost price of two dozen bananas is Rs. 32 After selling 18 bananas at the rate Rs. 12 per dozen, the shopkeeper reduced to rate as Rs. 4 per dozen. The per cent loss is

- (a) 25.2% (b) 32.4%
(c) 36.5% (d) 37.5 %

244. The price of a jewellery, passing through three hands, rises on the whole by 65%. If the first and the second sellers earned 20% and 25% profit respectively, the profit earned by the third seller is

- (a) 20% (b) 15%
(c) 10% (d) 5%

245. A person buys 100 cups at Rs. 10 each. On the way 20 cups are broken. He sells the remaining cups at Rs. 11 each. His loss per cent is

- (a) 15 (b) 10

- (c) $17\frac{1}{2}$ (d) 12

246. If the cost of pins reduces by Rs. 4 per dozen, 12 more pins can be purchased for Rs. 48. The cost of pins per dozen after reduction is:

- (a) Rs. 8 (b) Rs. 12
(c) Rs. 16 (d) Rs. 20

247. A piece of land came to a person through three middleman each gaining 20%. If the person purchased the land for Rs. 3,45,600 the original cost of the land was:

- (a) Rs. 1,00,000
(b) Rs. 1,50,000
(c) Rs. 1,75,800
(d) Rs. 2,00,000

248. If a man estimates his loss as 20% of the selling price, then his loss per cent is:

- (a) 20% (b) 25%
(c) $\frac{40}{3}\%$ (d) $\frac{50}{3}\%$

249. A person bought two articles A and B for Rs. 5,000. he sold A at 20% profit and B at 10% loss. He thus gained 2% on his out lay. The cost price of A was

- (a) Rs. 3,000 (b) Rs. 2,500
(c) Rs. 2,000 (d) Rs. 3,500

250. A person sold a TV for Rs. 9,400 then he lost a particular amount. When he sold another TV of the same type at Rs. 10,600, his gain was double the former loss. What was the cost price of each TV?

- (a) Rs. 9,800 (b) Rs. 10,000
(c) Rs. 10,200 (d) Rs. 10,400

251. A man sold 20 apples for Rs. 100 and gained 20%. How many apples did he buy for Rs. 100?

- (a) 20 (b) 22
(c) 24 (d) 25

252. A person bought 50 pens for Rs. 50 each. He sold 40 of them at a loss of 5%. he wants to gain

10% on the whole. Then his gain percent on the remaining pens should be

- (a) 15 (b) 40
(c) 50 (d) 70

253. A cloth merchant sold half of his cloth at 40% profit. half of remaining at 40% loss and the rest was sold at the cost price. In the total transaction his gain or loss will be

- (a) 20% gain (b) 25% loss
(c) 10% gain (d) 15% loss

254. A person sold an article at 20% profit on the selling price. Afterwards, when the cost price reduced by 10%, then he also reduced the selling price by 10%. His percentage of profit on cost price will be

- (a) 30 (b) 25
(c) 22.5 (d) 12.5

255. A salesman expects a gain of 13% on his cost price, If in a month his sale was Rs. 7,91,000, what was his profit ?

- (a) Rs. 85,659 (c) Rs. 88,300
(c) Rs. 91,000 (d) Rs. 97,786

(SSC CHSL DEO & LDC Exam 21.10.2012)

256. Ramesh bought 10 cycles for Rs. 500 each. He spent Rs.2,000 on the repair of all cycles. He sold five of them for Rs. 750 each and the remaining for Rs. 550 each. Then the total gain or loss % is

- (a) Gain of $8\frac{1}{3}\%$

- (b) Loss of $8\frac{1}{3}\%$

- (c) Gain of $7\frac{2}{3}\%$

- (d) Loss of $7\frac{1}{7}\%$

(SSC CHSL DEO & LDC Exam 1.10.2012)

257. A man purchased 150 pens at the rate of Rs. 12 per pen. He sold 50 pens at a gain of 10%. The percentage gain at which he must sell the remaining pens so as to gain 15% on the whole outlay is

- (a) $21\frac{1}{2}\%$ (b) 20%

- (c) 17% (d) $17\frac{1}{2}\%$

(SSC CHSL DEO & LDC Exam 1.10.2012)

258. A trader purchases a watch and a wall clock for Rs. 390. he sells them making a profit of 10% on the watch and 15% on the wall clock. He earns a profit of Rs. 51.50. The difference between the original price of the wall clock and the watch is equal to
(a) Rs. 80 (b) Rs. 120
(c) Rs. 110 (d) Rs. 100

(SSC CHSL DEO & LDC Exam 21.10.2012)

259. A merchant fixed the selling price of his articles at Rs.700 after adding 40% profit to the cost price. As the sale was very low at this price level, he decided to fix the selling price at 10% profit. Find the new selling price.

(a) Rs. 500 (b) Rs. 550
(c) Rs. 450 (d) Rs. 490

(SSC CHSL DEO & LDC Exam 21.10.2012)

260. From 2008 to 2009, the sales of a book decreased by 80%. If the sales in 2010 were the same as in 2008, by what percent did it increase from 2009 to 2010 ?
(a) 120% (b) 400%
(c) 80% (d) 100%

(SSC CHSL DEO & LDC Exam 21.10.2012)

261. The cost price of a radio is Rs. 600. The 5% of the cost price is charged towards transportation. After adding that, If the net profit to be made is 15%, then the selling price of the radio must be
(a) Rs. 704.50 (b) Rs. 724.50
(c) Rs. 664.50 (d) Rs. 684.50

(SSC MTS Exam 17.03.2013)

262. A shopkeeper purchased a TV for Rs. 2,000 and a radio for Rs. 750. He sells the TV at a profit of 20% and the radio at a loss of 5%. The total loss or gain is
(a) Gain Rs. 352.50
(b) Gain Rs. 362.50
(c) Loss Rs. 332
(d) Loss rs. 300

(SSC MTS Exam 21.10.2013)

263. The total cost of 8 buckets and 5 mugs is Rs. 92 and the total cost of 5 buckets and 8 mugs is Rs. 77. Find the total cost of 2 mugs and 3 buckets.
(a) Rs. 35 (b) Rs. 70
(c) Rs. 30 (d) Rs. 38

(SSC CGL Tier I Exam 19.05.2013)

264. A person bought two bicycles for Rs. 1600 and sold the first at 10% profit and the second at 20% profit. If he sold the first at 20% profit and the second at 10% profit. he would get Rs. 5 more. The difference of the cost price of the two bicycles was:
(a) Rs. 50 (b) Rs. 40
(c) Rs. 25 (d) Rs.75

(SSC CGL Tier I Exam 21.04.2013)

265. A man buys 3 cows and 8 goats in Rs. 47,200. Instead of he would have bought 8 cows and 3 goats he had to pay Rs. 53,000 more. Cost of one cow is :
(a) Rs. 11,000 (b) Rs. 12,000
(c) Rs. 13,000 (d) Rs. 10,000

(SSC CHSL DEO & LDC Ex. 10.11.2013)

266. A fruit seller buys 240 apples for ₹ 600. Some of these apples are rotten and are thrown away. He sells the remaining apples at ₹3.50 each and makes a profit of ₹ 198. The% of apples thrown away are?
(a) 6% (b) 5%
(c) 4% (d) 7%

(SSC CPO 21-06-2015, Morning)

267. A vendor purchased 40 dozen bananas for ₹ 250. Out of these 30 bananas were rotten and could not be sold. At what rate per dozen should he sell the remaining bananas to make a profit a of 20%?
(a) ₹ 12 (b) ₹ 10
(c) ₹ 8 (d) ₹ 6

(SSC LDC 1-11-2015, Morning)

268. Pawan kaul earns 15 percent on an investment but loses 10 per cent on another investment. If the ratio of two investments is 3 : 5, then the combined loss percent is

(a) $\frac{5}{4}$ (b) $\frac{4}{5}$
(c) $\frac{8}{5}$ (d) $\frac{5}{8}$

269. A trader sells two bullocks for Rs. 8,400 each, neither losing nor gaining in total. If he sold one of the bullocks at a gain of 20%, the other is sold at a loss of

(a) 20% (b) $18\frac{2}{9}\%$
(c) $14\frac{2}{7}\%$ (d) 21%

(SSC MTS Exam 24.03.2013)

270. A merchant has 1000 kg sugar, some part of which he sells at 8% profit and the rest at 18% profit. He gains 14% on the whole. The quantity sold at 8% profit is:

(a) 600 kg (b) 640 kg
(c) 400 kg (d) 560 kg

(SSC LDC 15-11-2015, Evening)

271. By selling an article at $\frac{3}{4}$ of selling price, a trader incurred a loss of 10%. The profit/loss percentage, when it is sold at the original selling price, is
(a) 20% loss (b) 120% profit
(c) 32.5% loss (d) 20% profit

(SSC CPO 20-03-2016, Morning)

272. A sold a watch at a gain of 5% to B and B sold it to C at a gain of 4%. If C paid Rs. 91 for it, then the price paid by A is:
(a) Rs. 84.33 (b) Rs. 83
(c) Rs. 82.81 (d) Rs. 83.33

(SSC CPO 20-03-2016, Evening)

273. By selling an Umbrella for Rs. 30, a shop-keeper gains 20% during a clearance sale the shop-keeper allows a discount of 10%. Find his gain percent during the sale season.

(a) $7\frac{1}{2}$ (b) 8
(c) 9 (d) 7

(SSC CPO 20-03-2016, Evening)

274. A sells a car priced at Rs. 36,000. He gives a discount of 8% on the 1st Rs. 20,000 and 5% on the remaining Rs. 16,000 B also sells a car of the same make, period at Rs. 36,000. He gives a discount of 7% on the total prices. Calculate the actual prices charged by A and B for the cars.

(a) A = Rs. 33, 500;
B = Rs. 33,400
(b) A = Rs. 33, 450;
B = Rs. 33,650
(c) A = Rs. 33,480;
B = Rs. 33,600
(d) A = Rs. 33,600;
B = Rs. 33,480

(SSC CPO 20-03-2016, Evening)

275. A person buys a bag at 25% discount on its original price. After few days, he sells it to his friend at 40% increase on the original price. What is his profit percentage(approx.)?

- (a) 75% (b) 80%
(c) 87% (d) 85%

(SSC CPO(Re) 04-06-2016, Morning)

276. A customer saves Rs. 320 at the rebate of 20% on market price of an article. If the cost price of the article for shopkeeper is Rs. 1000, then the profit percent of shopkeeper is:

- (a) 30% (b) 28%
(c) 20% (d) 25%

(SSC CPO(Re) 04-06-2016, Evening)

277. A loss of 20% gets converted into a profit of 15% when the selling price of an article is increased by ₹ 70. Find the cost price of the article

- (a) ₹ 100 (b) ₹ 150
(c) ₹ 200 (d) ₹ 250

(SSC CPO(Re) 05-06-2016, Morning)

278. A discount of 10% is given by a salesman for cash payment. What should be the marked price if he wants to earn a profit of 5%?

- (a) 16.66% (b) 15%
(c) 22% (d) 10%

(SSC CPO(Re) 05-06-2016, Evening)

279. A shopkeeper purchased 50 dozen cups for Rs. 3000. Out of these, 60 cups were broken and could not be sold. At what rate per dozen should he sell the remaining cup to make a profit of 20%?

- (a) Rs. 60 (b) Rs. 75
(c) Rs. 80 (d) Rs. 90

(SSC CPO(Re) 06-06-2016, Morning)

280. If a commission at the rate of 10% is given to a bookseller on the marked price of a book by the publisher, the publisher gains 20%. If the commission is increased to 15%, then the gain percent would be:

- (a) $16\frac{2}{3}\%$ (b) $13\frac{1}{3}\%$
(c) $15\frac{5}{6}\%$ (d) $12\frac{1}{2}\%$

(SSC CPO(Re) 06-06-2016, Evening)

281. For ₹ 25,500, a furniture shop sells 3 computer tables and 5 chairs OR 2 computer tables and 9 chairs. If one wants to buy a set of only 1 computer table and 1 chair, how much does he need to pay?

- (a) ₹ 1,500 (b) ₹ 5,100
(c) ₹ 6,000 (d) ₹ 7,500

(SSC CPO(Re) 07-06-2016, Morning)

282. The marked price of a laptop is ₹ 12000. In a clearance sale it is sold at a discount of 15%, incurring a loss of 4%. What is the cost price of the laptop?

- (a) ₹ 10200 (b) ₹ 10625
(c) ₹ 11200 (d) ₹ 10272

(SSC CPO(Re) 07-06-2016, Evening)

283. A shopkeeper has 11 books of same cost price. He sells the first book at certain price, then he sells second book at a price which is ₹ 1 less than the selling price of first book and then he sells third book at a price which is ₹ 1. less than the selling price of second book. Following this pattern, he sold all 11 books. If he sells sixth book at its cost price. Find the overall percent profit or loss on selling all 11 books.

- (a) 20% (b) 10%
(c) $\frac{1}{11}\%$ (d) No profit no Loss

(SSC CPO(Re) 08-06-2016, Morning)

284. James and Vaibhav are gamblers. Last year, the ratio between money lost by James and Vaibhav was 4 : 5. The ratios of their individual losses of the last year and present year are 3 : 5 and 2 : 3 respectively. If total loss incurred to both of them this year is Rs. 3,57,000 the present loss of James is:

- (a) 1,70,000 (b) 1,59,00
(c) 1,68,000 (d) 1,37,000

(SSC CPO(Re) 08-06-2016, Evening)

285. There would be a loss of 10% if an article is sold for 43.20. At what price should it be sold to gain 10%?

- (a) ₹ 48.80 (b) ₹ 52.80
(c) ₹ 56.20 (d) ₹ 56.80

(SSC CPO(Re) 09-06-2016, Morning)

286. The selling price of 8 articles is same as the cost price of 10 articles. What is profit%

- (a) 25% (b) 30%
(c) 22% (d) 33%

(SSC CPO(Re) 09-06-2016, Evening)

287. A merchant marks an article 20% above cost price. Then he sells it at a discount of 20%. The sale gives him:

- (a) No loss or gain
(b) 4% loss
(c) 2% gain
(d) 4% gain

(SSC CPO(Re) 09-06-2016, Morning)

288. The C.P of 10 articles is equal to the S.P of 15 articles. What is the profit or loss percentage?

- (a) 25.5% (b) 35%
(c) 10% (d) 33.3%

(SSC CPO(Re) 09-06-2016, Evening)

289. Two mobile phones are sold at Rs. 6000 each. The first mobile is sold at 20% profit and the other one at 25% loss. What is the percentage of loss or profit incurred during the deal?

- (a) 7.7% loss (b) 8.3 loss
(c) 9 % loss (d) 2% profit

(SSC CPO(Re) 10-06-2016, Morning)

290. A shopkeeper gains 21% after allowing a discount of 12% on the marked price of an article. Find his profit percent, if the article is sold at marked price allowing no discount.

- (a) 30% (b) 35%
(c) 37.5% (d) 31.5%

(SSC CPO(Re) 10-06-2016, Evening)

291. A trader purchased a gift box for Rs. 150. What should be the marked price on the gift box so that after allowing a discount of 10%, he makes a profit of 10%?

- (a) Rs. 180 (b) Rs. 183.3
(c) Rs. 186.6 (d) Rs. 190

(SSC CPO(Re) 11-06-2016, Morning)

292. A vegetable seller sells his vegetables at 20% profit. At the same time he uses false weights, which is 10% less than the actual weight. What will be his total gain percentage?

- (a) 25% (b) 30%
(c) 33.33% (d) $18\frac{7}{9}\%$

(SSC CPO(Re) 11-06-2016, Evening)

293. A shopkeeper purchases two items for Rs. 520. One of them is sold gaining 16% and the other at a loss of 10%, thus making no profit or loss. What is the selling price of the item sold at loss?

- (a) Rs. 288 (b) Rs. 232
(c) Rs. 320 (d) Rs. 200

(SSC CPO(Re) 11-06-2016, Morning)

294. Arun buys one kilogram of apples for Rs. 120 and sells it to Swati gaining 25%. Swati sells it to Divya and Divya again sells it for Rs. 198, making a profit of 10%. What is the profit percentage made by Swati?

- (a) 25% (b) 20%
(c) 16.67% (d) 15%

(SSC CPO(Re) 11-06-2016, Evening)

295. A dealer marks his goods 20% above cost price. He then allows some discount on it and makes a profit of 8%. The rate of discount is

- (a) 4% (b) 6%
(c) 10% (d) 12%

(SSC CGL Pre Exam 2016)

296. A dishonest dealer professes to sell his goods at cost price but uses a weight of 875 gms for the kilogram weight. His gain in the percentage is

- (a) 17% (b) $14\frac{5}{7}\%$
(c) $14\frac{2}{7}\%$ (d) 14%

(SSC CGL Pre Exam 2016)

297. At what percentage above the cost price must an article be marked so as to gain 33% after allowing a customer a discount of 5%?

- (a) 40% (b) 45%
(c) 35% (d) 47%

(SSC CGL Pre Exam 2016)

298. A man buys a table and a chair for 500. He sells the table at a loss of 10% and the chair at a gain of 10%. He still gains ₹10 on the whole. The cost price of chair in rupees is

- (a) ₹200 (b) ₹250
(c) ₹300 (d) ₹350

(SSC CGL Pre Exam 2016)

299. A dealer allows a discount of 15%. A customer pays an amount of ₹318.75 for an article. At what price is the article listed?

- (a) ₹366.50 (b) ₹375.00
(c) ₹350.00 (d) ₹431.25

(SSC CGL Pre Exam 2016)

300. A man bought 25 crates of oranges for 10,000. He lost 5 crates. In order to earn a total profit of 25% of the total cost, he would have to sell each of the remaining crates at

- (a) ₹650 (b) ₹625
(c) ₹600 (d) ₹575

(SSC CGL Pre Exam 2016)

301. A dishonest shopkeeper professes to sell goods at his cost price but uses a false weight of 950 gms, for each kilogram. His gain percentage is

- (a) $11\frac{1}{9}\%$ (b) $9\frac{1}{11}\%$
(c) 10% (d) $\frac{100}{19}\%$

(SSC CGL Pre Exam 2016)

302. A man sells an article at 15% profit. If he had sold it for ₹6 more, he would have gained 18%. The man bought the article for

- (a) 100 (b) 150
(c) 200 (d) 250

(SSC CGL Pre Exam 2016)

303. If the successive discounts by 20%, 10% and 5%, then the single equivalent rate of discount is

- (a) 31.6% (b) 31.5%
(c) 31% (d) 31.4%

(SSC CGL Pre Exam 2016)

304. The selling price of 6 bananas is equal to the cost price of 8 bananas. Then the percentage of profit is

- (a) 20 (b) $33\frac{1}{3}$
(c) 25 (d) 30

(SSC CGL Pre Exam 2016)

305. The marked price of a ceiling fan is Rs. 1200 and the shopkeeper allows a discount of 5% on it. Then selling price of the fan is

- (a) Rs. 1410 (b) Rs. 1400
(c) Rs. 1140 (d) Rs. 1104

(SSC CGL Pre Exam 2016)

306. When a discount of 42 is allowed on the marked price of an article, the new reduced price becomes 86% of the original price. Find the marked price.

- (a) ₹250 (b) ₹300
(c) ₹350 (d) ₹400

(SSC CGL Pre Exam 2016)

307. A merchant buys 25 litres of milk daily at the rate ₹12 per litre. He mixes 5 litres of water in it and sells at the rate ₹10.40 per litre. His gain/loss is:

- (a) 8% profit
(b) 2% profit
(c) 4% profit
(d) 6% profit

(SSC CGL Pre Exam 2016)

308. A fan is listed at ₹150 with a discount of 20%. What additional discount must be offered to the customer to bring the net price to ₹108?

- (a) $11\frac{1}{9}\%$ (b) 15%
(c) 8%
(d) None of these

(SSC CGL Pre Exam 2016)

309. Cost price of 28 articles is equal to Sale price of 21 articles, then percentage of profit is

- (a) 12% (b) $33\frac{1}{3}\%$
(c) 20% (d) 22%

(SSC CGL Pre Exam 2016)

310. Loss of 20% on selling price is equal to x% loss in cost price. What is x?

- (a) 20% (b) 20
(c) $16\frac{2}{3}\%$ (d) 16

(SSC CGL Pre Exam 2016)

311. If the ratio of cost price and selling price be 10 : 11 then find the profit percent?

- (a) 1% (b) 10%
(c) 5% (d) 8%

(SSC CGL Pre Exam 2016)

312. If 10% loss is made on selling price, then the rate of loss on the cost price will be

- (a) $11\frac{1}{9}\%$ (b) $9\frac{1}{11}\%$
(c) 10% (d) 11%

(SSC CGL Pre Exam 2016)

313. While selling a watch, a shopkeeper gives a discount of 5%. If he gives a discount of 7%, he earns ₹15 less as profit. The marked price of the watch is

- (a) 697.5 (b) 712.5
(c) 750 (d) None of these

(SSC CGL Pre Exam 2016)

314. A retailer gets a discount of 40% on the printed price of an article. The retailer sells it at the printed price. His gain percent is

- (a) 40 (b) 55
(c) $66\frac{2}{3}$ (d) 75

(SSC CGL Pre Exam 2016)

315. If the cost price of 25 pens is equal to the selling price of 20 pens, then profit percent is

- (a) 20% (b) 25%
(c) 15% (d) 5%

(SSC CGL Pre Exam 2016)

316. A dealer marks a washing machine for ₹7500, and allows a discount of 6% on it. Find the selling price

- (a) 6850 (b) 7050
(c) 7250 (d) 6950

(SSC CGL Pre Exam 2016)

317. The marked price of an article is 30% higher than the cost price. If a trader sells the articles allowing 10% discount to customer, then the gain percent will be

- (a) 17 (b) 20
(c) 19 (d) 15

(SSC CGL Mains Exam 2016)

318. A merchant marked the price of an article by increasing its production cost by 40%. Now he allows 20% discount and gets a profit of Rs. 48 after selling it. The production cost is

- (a) Rs. 320 (b) Rs. 360
(c) Rs. 400 (d) Rs. 440

(SSC CGL Mains Exam 2016)

319. A watch dealer pays 10% customs duty on a watch which costs Rs. 500 abroad. He desires to make a profit of 20% after giving a discount of 25% to the buyer. The marked price should be

- (a) Rs. 950 (b) Rs. 800
(c) Rs. 880 (d) Rs. 660

(SSC CGL Mains Exam 2016)

320. A shopkeeper allows 25% discount on his advertised price and to make a profit 25% on his outlay. What is the advertised price (in Rs.) on which he gains Rs. 6000?

- (a) 36000 (b) 4000
(c) 39000 (d) 42500

(SSC CGL Mains Exam 2016)

321. If the profit on selling an article for Rs. 425 is the same as the loss on selling it for Rs. 355, then the cost price of the article is

- (a) Rs. 410 (b) Rs. 380
(c) Rs. 400 (d) Rs. 390

(SSC CGL Mains Exam 2016)

322. A & B jointly made a profit of Rs. 1650 and they decided to share it such that $\frac{1}{3}$ of A's profit is equal to $\frac{2}{5}$ of B's profit. Then profit of B is

- (a) Rs. 700 (b) Rs. 750
(c) Rs. 850 (d) Rs. 800

(SSC CGL Mains Exam 2016)

323. 4% of the selling price of an article is equal to 5% of its cost price. Again 20% of the selling price is Rs. 120 more than 22% of its cost price. The ratio of cost price & selling price is

- (a) 2 : 3 (b) 3 : 2
(c) 4 : 5 (d) 5 : 4

(SSC CGL Mains Exam 2016)

324. Due to 25% fall in the rate of eggs one can buy 2 dozen eggs more than before by investment Rs. 162. The original rate per dozen of the eggs is

- (a) Rs. 22 (b) Rs. 24
(c) Rs. 27 (d) Rs. 30

(SSC CGL Mains Exam 2016)

325. Last year Mr. A bought two paintings. This year he sold them for Rs. 20,000 each. On one, he made a 25% profit and of the other he had a 25% loss. Then his net profit or loss is

- (a) He lost more than Rs. 2000
(b) He lost more than Rs. 2000
(c) He earned more than Rs. 2000
(d) He earned less than Rs. 2000

(SSC CGL Mains Exam 2016)

326. A shopkeeper sells rice at 10% profit and uses weight 30% less the actual measure. His gain percent is

- (a) $57\frac{2}{3}\%$ (b) $57\frac{1}{7}\%$
(c) $57\frac{2}{5}\%$ (d) $57\frac{3}{7}\%$

(SSC CGL Mains Exam 2016)

327. A photographer allows a discount of 10% on the advertised price of a camera. The price (in ₹) that must be marked on the camera, which cost him ₹ 600 to make a profit of 20% would be

- (a) 60 (b) 800
(c) 700 (d) 850

(SSC CGL Mains Exam 2016)

328. A dinner set is quoted for ₹ 1500. A customer pays ₹ 1173 for it. If the customer get a series of two discounts and the rate of first discount is 15% then the rate of second discount was,

- (a) 15% (b) 7%
(c) 9% (d) 8%

(SSC CGL Mains Exam 2016)

329. A dishonest dealer defrauds to the extent of x% in buying as well as selling goods by using faulty weight. What will be the gain percent on his outlay?

- (a) $2x\%$ (b) $\left(\frac{10}{x} + x^2\right)\%$
(c) $\left(2x + \frac{x^2}{100}\right)\%$ (d) $\left(x + \frac{x^2}{100}\right)\%$

(SSC CGL Mains Exam 2016)

330. The ratio of cost price and selling price of an article is 20 : 21. The gain percent on it is

- (a) 4 (b) 5
(c) 6 (d) 10

(SSC CGL Mains Exam 2016)

331. The ratio of cost price and selling price 25 : 26. The percent of profit will be

- (a) 26% (b) 25%
(c) 1% (d) 4%

(SSC CGL Mains Exam 2016)

332. A shopkeeper buys a product of ₹150 per kg. 15% of product was damaged. At what price (per kg) should he sell the remaining so as to earn a profit of 20%?

- (a) ₹ 218 $\frac{13}{17}$ (b) ₹ 207 $\frac{13}{17}$
(c) ₹ 225 $\frac{13}{17}$ (d) ₹ 211 $\frac{13}{17}$

(SSC CGL Mains Exam 2016)

333. Mr. Kapur purchased two toy cycles for ₹ 750 each. He sold these cycles, gaining 6% on one and losing 4% on the other. The gain or loss percent in the whole transaction is

- (a) 1% loss (b) 1% gain
(c) 1.5% loss (d) 1.5% gain

(SSC CGL Mains Exam 2016)

334. The profit earned by a shopkeeper by selling a bucket at a gain of 8% is ₹ 28 more than when he sells it at a loss of 8%. The cost price (in Rupees) of the bucket is

- (a) 170 (b) 190
(c) 175 (d) 165

(SSC CGL Mains Exam 2016)

335. A Man bought 500 metre of electric wire at 50 paise per metre he sold 50% part at the profit of 5%, at what % profit he sold remaining as to gain 10% on the whole transaction?

- (a) 13% (b) 12.5%
(c) 15% (d) 20%

(SSC CGL Mains Exam 2016)

336. A book seller allowed 10% discount on printed price. He gets 30% commission from publisher. His profit in percent will be

- (a) 20 (b) $28\frac{4}{7}$
(c) 25 (d) $28\frac{3}{7}$

(SSC CGL Mains Exam 2016)

337. A dealer is selling an article at a discount of 5% on the marked price. If the marked price is 12% above the cost price and the article was sold for ₹ 532 then the cost price is (in ₹)

- (a) 500 (b) 525
(c) 505 (d) 520

(SSC CGL Mains Exam 2016)

338. A shopkeeper increases the price of an object by 40% and then sells it at 25% discount on the marked price. If the selling price of such an object be ₹ 2100, its cost price for the shopkeeper was?

- (a) 3000 (b) 1500
(c) 1750 (d) 2000

(SSC CGL Mains Exam 2016)

339. By what fraction selling price (S.P.) must be multiplied to get the cost price (C.P.) if the loss is 20%?

- (a) $\frac{4}{5}$ (b) $\frac{8}{5}$
(c) $\frac{5}{4}$ (d) $\frac{6}{5}$

(SSC CGL Mains Exam 2016)

340. Ramesh sold a book at a loss of 30%. If he has sold it for ₹ 140 more, he would have made a profit of 40%. The cost price of the book is

- (a) ₹ 280 (b) ₹ 200
(c) ₹ 260 (d) ₹ 300

(SSC CGL Mains Exam 2016)

341. A shopkeeper purchased 510 eggs at the rate of ₹ 20 per dozen. 30 eggs were broken on the way. In order to make a gain of 20%, he must sell the remaining eggs at the rate of

- (a) ₹ 22.50 per dozen
(b) ₹ 25.50 per dozen
(c) ₹ 26 per dozen
(d) ₹ 26.50 per dozen

(SSC CGL Mains Exam 2016)

342. A sells a watch to B and makes a loss of 12%. B makes a profit of

$12\frac{1}{2}\%$ by selling the watch to C.

If A sells the watch to be at the cost of which C purchased it, then the percentage of loss or profit of A will be.

- (a) 1% loss (b) 1% Profit
(c) 2% loss (d) 2% Profit

(SSC CGL Mains Exam 2016)

343. A man buys 3 type-I cakes and 6 types-II cakes for ₹ 900. He sells type-I cakes at a profit of 15% and type-II cakes at a loss of 10%. If his overall profits is ₹ 30, the cost price (in ₹) of a type-I and of a type-II cakes is

- (a) 100, 100 (b) 160, 70
(c) 180, 60 (d) 120, 90

(SSC CGL Mains Exam 2016)

EXPLANATION

SOME ACRONYMS

CP	→	Cost Price
SP	→	Selling Price
MP	→	Marked Price
OP	→	Original Price
RP	→	Reduced Price

1. (a) Given:

$$36 \text{ CP} = 30 \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{30}{36} = \frac{5}{6} > 1 \text{ (Profit)}$$

$$\text{Profit\%} = \frac{\text{Profit}}{\text{CP}} \times 100$$

$$= \frac{1}{5} \times 100 = 20\%$$

2. (c) Given:

$$15 \text{ CP} = 10 \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{10}{15} = \frac{2}{3} > 1 \text{ Profit}$$

$$\text{Profit \%} = \frac{\text{Profit}}{\text{CP}} \times 100$$

$$= \frac{1}{2} \times 100 = 50\%$$

3. (b) According to question,

$$\text{SP of 3 toys} = \text{CP of 4 toys}$$

$$\frac{\text{SP}}{\text{CP}} = \frac{4}{3} > 1 \text{ gain}$$

$$\text{gain\%} = \frac{\text{Gain}}{\text{CP}} \times 100$$

$$= \frac{1}{3} \times 100 = 33\frac{1}{3}\%$$

4. (c) According to question,

$$\text{CP of 15 tables} = \text{SP of 20 tables}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{20}{15} > 5 \text{ units loss}$$

$$\therefore \text{Loss\%} = \frac{5}{20} \times 100 = 25\%$$

5. (b) According to question,

$$\text{CP of 18 articles} = \text{SP of 15 articles}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{15}{18} > 3 \text{ units profit}$$

$$\text{Profit\%} = \frac{3}{15} \times 100 = 20\% \text{ Profit}$$

6. (a) According to question,

$$\frac{\text{CP}}{\text{SP}} = \frac{5}{4} > 1 \text{ unit loss}$$

$$\text{loss\%} = \frac{1}{5} = 20\% \text{ loss}$$

7. (a) According to question,

$$\frac{\text{CP}}{\text{SP}} = \frac{20}{21} > 1 \text{ unit Profit}$$

$$\text{Profit\%} = \frac{1}{20} \times 100 = 5\%$$

8. (d) According to question,

$$\text{SP} = \frac{8}{5} \times \text{CP}$$

$$\frac{\text{SP}}{\text{CP}} = \frac{8}{5} > 3 \text{ gain}$$

$$\text{gain\%} = \frac{3}{5} \times 100 = 60\%$$

9. (d) According to question,

$$50 \text{ CP} = 40 \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{40}{50} > 10 \text{ Profit}$$

$$\text{Profit \%} = \frac{10}{40} \times 100 = 25\%$$

10. (b) According to question,

$$12 \text{ CP} = 10 \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{10}{12} \Rightarrow \frac{5}{6} > 1 \text{ Profit}$$

$$\text{Profit\%} = \frac{1}{5} \times 100 = 20\%$$

11. (a) According to question,

$$10 \text{ CP} = 9 \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{9}{10} > 1 \text{ Profit}$$

$$\text{Profit\%} = \frac{1}{9} \times 100 = 11\frac{1}{9}\%$$

12. (d) According to question,

$$\begin{array}{ccc} \text{CP} & & \text{SP} \\ 100 & \xrightarrow{52\% \text{ profit}} & 152 \\ & & \times \frac{1}{2} \\ & & \text{Actual SP} \\ & & \text{Rs. 76} \end{array}$$

$$152 \text{ units} \rightarrow \text{Rs. 76}$$

$$1 \text{ unit} \rightarrow \frac{76}{152} \Rightarrow \frac{1}{2}$$

$$100 \text{ units} \rightarrow \frac{1}{2} \times 100 = 50$$

$$\text{CP} \rightarrow \text{Rs. 50}$$

$$\therefore \text{If SP} \rightarrow \text{Rs. 75}$$

$$\text{Profit\%} = \frac{25}{50} \times 100 = 50\%$$

13. (d) According to question,

$$12 \text{ CP} = 8 \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{8}{12} = \frac{2}{3} > 1 \text{ profit}$$

$$\text{Profit\%} = \frac{1}{2} \times 100 = 50\%$$

$$14. (c) 15\% = \frac{3}{20} \text{ } (-)$$

$$20\% = \frac{1}{5} \text{ } (-)$$

$$\text{M.P. : Net price}$$

$$20 : 17$$

$$5 : 4$$

$$100 : 68$$

$$100 \text{ units} = ₹ 50$$

$$1 \text{ unit} = ₹ 0.5$$

$$68 \text{ units} = ₹ 34$$

15. (b) According to question,

$$10 \text{ CP} = 7 \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{7}{10} > 3 \text{ units profit}$$

$$\text{Profit\%} = \frac{3}{7} \times 100 = 42\frac{6}{7}\% \text{ gain}$$

16. (b) According to question,

$$2750 \text{ CP} = 2500 \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{2500}{2750} = \frac{10}{11} > 1 \text{ units profit}$$

$$\text{Profit\%} = \frac{1}{10} \times 100 = 10\% \text{ gain.}$$

17. (d) According to question,

$$15 \text{ CP} = 20 \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{20}{15} = \frac{4}{3} > 1 \text{ unit loss}$$

$$\text{loss\%} = \frac{1}{4} \times 100 = 25\%$$

18. (b) According to question,
10 CP = 18 SP

$$\frac{CP}{SP} = \frac{18}{10} \times \frac{9}{5} > 4 \text{ units loss}$$

$$\text{loss\%} = \frac{4}{9} \times 100 = 44\frac{4}{9}\%$$

- 19.(b) The loss of percentage on Artical is 15%

$$15\% = \frac{15}{100} = \frac{3}{20} \rightarrow \text{Loss}$$

$$SP = 17$$

$$CP : SP = 20 : 17$$

- 20.(d) According to question,
24 CP = 18 SP

$$\frac{CP}{SP} = \frac{18}{24} \times \frac{3}{4} > 1 \text{ unit profit}$$

$$\text{Profit\%} = \frac{1}{3} \times 100 = 33\frac{1}{3}\%$$

- 21.(d) According to question,
CP = 80% of SP

$$CP = \frac{80}{100} SP$$

$$\frac{CP}{SP} = \frac{80}{100} = \frac{4}{5} > 1 \text{ unit profit}$$

$$\text{Profit\%} = \frac{1}{4} \times 100 = 25\%$$

- 22.(c) List price of TV = 2300

$$\text{Selling price} = 2300 \times \frac{75}{100} \times \frac{90}{100} = 1552.5$$

- 23.(c) According to question,

$$400 CP = 320 SP$$

$$\frac{CP}{SP} = \frac{320}{400} = \frac{4}{5} > 1 \text{ unit profit}$$

$$\text{Profit\%} = \frac{1}{4} \times 100 = 25\%$$

- 24.(c) According to question,
b = 200% of a

$$b = \frac{200}{100} \times a$$

$$\frac{b}{a} = \frac{2}{1}$$

$$\frac{CP}{SP} = \frac{a}{b} = \frac{1}{2} > 1 \text{ unit profit}$$

$$\text{Profit\%} = \frac{1}{1} \times 100 = 100\%$$

- 25.(c) According to question,

$$400 SP = 320 CP$$

$$\frac{CP}{SP} = \frac{400}{320} = \frac{5}{4} > 1 \text{ unit loss}$$

$$\text{Loss\%} = \frac{1}{5} \times 100 = 20\%$$

- 26.(c) Let price at A = 100x

After

then price at B = 85x \rightarrow 15% discount

According to question,

$$100x - (85x + 150) = 150$$

$$15x = 300$$

$$x = 20$$

$$\text{Price at A} = 100 \times 20 = 2000$$

$$\text{Price at B including travelling charge} = 85x + 150$$

$$= 1700 + 150 = 1850$$

Percentage Profit

$$= \frac{2000 - 1850}{2000} \times 100$$

$$= \frac{150}{2000} \times 100 = 7.5\%$$

- 27.(d) According to question,

$$18 CP = 16 SP$$

$$\frac{CP}{SP} = \frac{16}{18} = \frac{8}{9} > 1 \text{ unit profit}$$

$$\text{Profit\%} = \frac{1}{8} \times 100 = 12\frac{1}{2}\%$$

- 28.(a) According to question,

$$CP \text{ of toys} = \text{Rs. } 5$$

$$SP \text{ of toys} = \text{Rs. } 4.5$$

$$\text{Loss} = CP - SP = 5 - 4.5 = 0.5$$

$$\text{Loss\%} = \frac{0.5}{5} \times 100 = 10\%$$

- 29.(c) According to question,

$$\frac{CP \text{ of Refrigerator}}{CP \text{ of Television}} = \frac{5}{3} > 2 \text{ units}$$

$$2 \text{ units} = 5500$$

$$1 \text{ unit} = \frac{5500}{2} = 2750$$

$$5 \text{ units} = 2750 \times 5 = 13750$$

$$CP \text{ of Refrigerator} = \text{Rs. } 13750$$

- 30.(d) CP of a book ranges between

$$= 150 \text{ to } 300 \text{ Rs.}$$

$$SP \text{ of a book ranges between}$$

$$= 250 \text{ to } 350 \text{ Rs.}$$

for maximum profit CP should minimum & SP should be maximum

$$\text{So, } CP = 150$$

$$SP = 350$$

$$\text{Profit} = SP - CP$$

$$= 350 - 150$$

$$= \text{Rs. } 200/\text{book}$$

$$\text{Total Profit on 15 books}$$

$$= 200 \times 15 = \text{Rs. } 3000$$

- 31.(c) Discount = 540 - 496.80 = 43.2

$$\begin{aligned} \% \text{ discount} &= \frac{43.2}{540} \times 100 \\ &= 8\% \end{aligned}$$

- 32.(c) According to question,

	House		Shop
CP	10		10
		20% Loss	
SP	8		12
			20% gain

for same SP

Total

CP	10 ₁₂ = 120	10 ₈ = 80	200	> Loss = 8 units
SP	8 ₁₂ = 96	12 ₈ = 96	192	

A.T.Q.

$$192 \text{ units} = 2 \text{ lakhs}$$

$$1 \text{ unit} = \frac{2}{192} \text{ lakh}$$

$$8 \text{ units} = \frac{2}{192} \times 8 = \frac{1}{12} \text{ lakh}$$

- 33.(d) Quicker Approach,
Always loss in such type of questions.

$$\begin{aligned} \text{Loss\%} &= \frac{\text{Loss\%} \times \text{Profit\%}}{100} \\ &= \frac{20 \times 20}{100} = 4\% \text{ loss} \end{aligned}$$

- 34.(c) According to quesiton,

	Pipes-1	Pipes-2	Total
CP	10 ₈ = 80	10 ₁₂ = 120	200
			> loss 8 units
SP	12 ₈ = 96	8 ₁₂ = 96	
	make SP same		24
	192 units \rightarrow		Rs. 24

$$1 \text{ unit} \rightarrow \frac{24}{192}$$

$$8 \text{ unit} \rightarrow \frac{24}{192} \times 8 = \text{Rs. } 1 \text{ loss}$$

- 35.(b) In such type of question always loss

Quicker approach

$$\frac{P\% \times L\%}{100} = \frac{10 \times 10}{100} = 1\% \text{ loss}$$

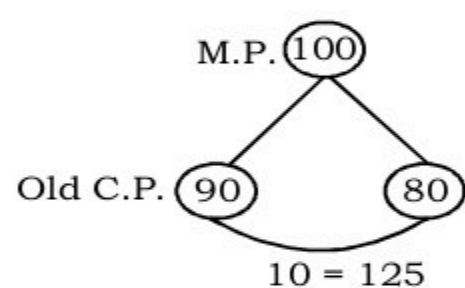
Alternate:-

	Tape-1	Tape-2	Total	
CP	10 _{x9} = 90	10 _{x11} = 110	200	
	+10% profit	-10% loss		
SP	11 _{x9} = 99	9 _{x11} = 99	198	2 unit loss

to make SP same

$$\text{loss}\% = \frac{2}{200} \times 100 = \mathbf{1\% \text{ loss}}$$

36. (b)



$$10 \text{ unit} = 125$$

$$100 \text{ unit} = 125 \times 10 = 1250$$

$$\text{Marked price} = 1250$$

37. (a) S.P. at 4% profit 104% = 1040

$$\therefore 100 = \frac{1040}{104} \times 100$$

$$\text{C.P.} = 1000$$

$$\text{Loss \% at selling on 950}$$

$$= \frac{1000 - 950}{1000} \times 100 = 5\%$$

38. (b) According to question,

	TV	Refrigerator	Total	
CP	5 _{x6} = 30	5 _{x4} = 20	50	
	-20% loss	+20% profit		
SP	4 _{x6} = 24	6 _{x4} = 24	48	2 unit loss

to make SP same

48 units → Rs. 24000

Actual (SP) 24000

$$1 \text{ unit} \rightarrow \frac{24000}{48} = 500$$

$$50 \text{ units} \rightarrow 500 \times 50 = \text{Rs. } 25000$$

$$\text{CP} \rightarrow \text{Rs. } 25000$$

$$\text{SP} \rightarrow \text{Rs. } 24000$$

$$\text{Loss} = \text{CP} - \text{SP}$$

$$25000 - 24000 = \text{Rs. } 1000$$

39. (d) According to question,

	Bicycles-1	Bicycles-2	Total	
CP	20 _{x19} = 380	20 _{x21} = 420	800	
SP	21 _{x19} = 399	19 _{x21} = 399	798	2 unit loss

to make SP of both bicycle same

$$\text{loss}\% = \frac{2}{800} \times 100 = \mathbf{0.25\% \text{ Loss}}$$

$$40. (b) 25\% = \frac{1}{4} \xrightarrow{\times 8} 8$$

Required no. of meters

$$= \frac{40}{8} = 5 \text{ mtr.}$$

41. (a) 10%-5% → 1000

$$5\% \rightarrow 1000$$

$$100\% = 20000 \text{ (which is C.P.)}$$

42. (b) According to question,

	Chair - 1	Chair - 2	Total	
CP	4 _{x3} = 12	4 _{x5} = 20	32	
	25% profit	25% loss		
SP	5 _{x3} = 15	3 _{x5} = 15	30	2 units loss

to make SP same

$$30 \text{ units} = 120 \times 2 = 240$$

$$1 \text{ unit} = \frac{240}{30}$$

$$2 \text{ units} = \frac{240}{30} \times 2 = \text{Rs. } 16$$

43. (d) According to question,

	Article - 1	Article - 2	Total	
CP	4 _{x3} = 12	4 _{x5} = 20	32	
	25% profit	25% loss		
SP	5 _{x3} = 15	3 _{x5} = 15	30	2 units loss

$$\text{Loss}\% = \frac{2}{32} \times 100 = \mathbf{6\frac{1}{4}\%}$$

44. (a) ATQ

$$\text{Loss } 20\%$$

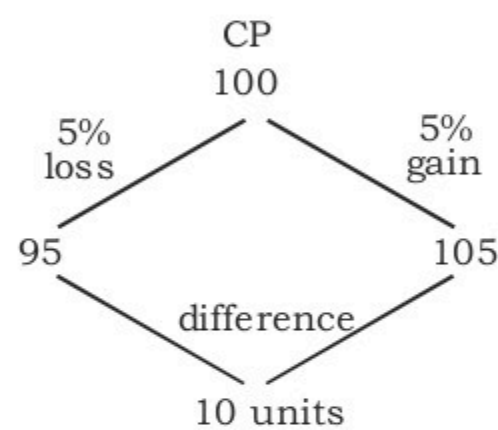
$$\text{SP} = 100\% - 20 = 80\%$$

$$80\% = 480$$

$$1 = 480/80$$

$$(\text{profit } 20\%) = \frac{480}{80} \times 120 = 720$$

45. (c) According to question,



$$10 \text{ units} = \text{Rs. } 5$$

$$1 \text{ unit} = \frac{5}{10}$$

$$\therefore \text{CP} = 100 \text{ units} = \frac{5}{10} \times 100 = \text{Rs. } 50$$

46. (c) According to question,

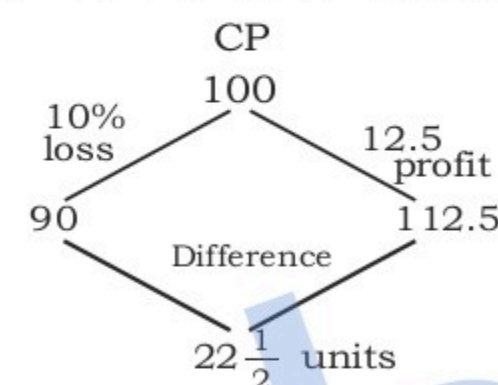
	CP	Loss	SP	
	100	9	91	for 9% loss
			↓	
			105	for 30% Profit
				CP Profit SP
				100 30 130

$$\Rightarrow 1 \text{ unit} \rightarrow \frac{105}{91}$$

$$\Rightarrow 130 \text{ unit} \rightarrow \frac{105}{91} \times 130$$

$$= \text{Rs. } 150$$

47. (a) According to question,



$$22\frac{1}{2} \text{ units} = 9$$

$$1 \text{ unit} = 9 \times \frac{2}{45}$$

$$100 \text{ units} = \frac{2}{5} \times 100 = \text{Rs. } 40.$$

48. (d) According to question,

$$\text{Difference in Price} = 400 - 350 = \text{Rs. } 50$$

$$\text{as } 5\% = \text{Rs. } 50$$

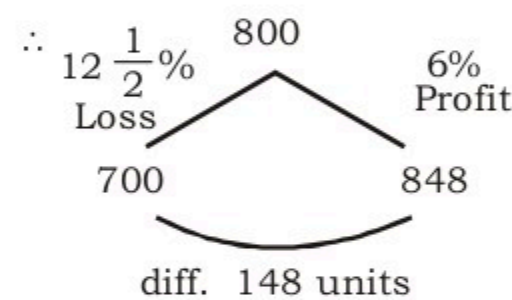
$$1\% = \text{Rs. } 10$$

$$\text{C.P.} = 100\% = 10 \times 100 = \text{Rs. } 1000$$

49. (a) According to question,

$$12\frac{1}{2}\% \text{ loss means} = \frac{1}{8}$$

$$\text{or } \frac{100 \rightarrow \text{Loss}}{800 \rightarrow \text{CP}}$$



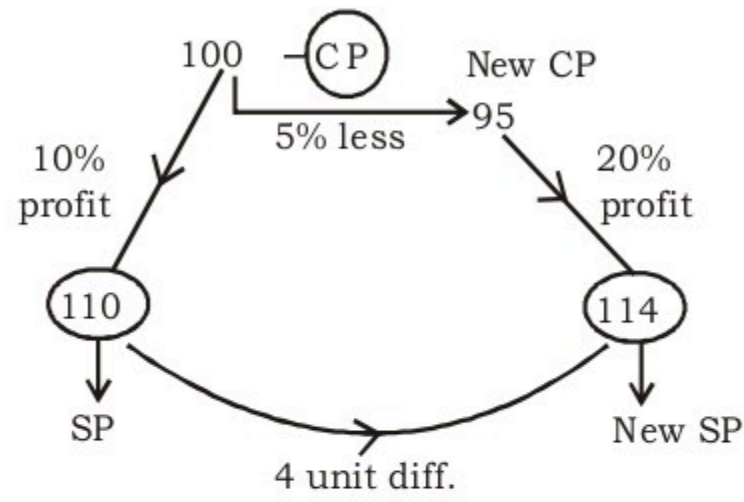
$$148 \text{ units} \rightarrow 51.80$$

$$1 \text{ unit} \rightarrow \frac{51.8}{148}$$

$$800 \text{ units} \rightarrow \frac{51.8}{148} \times 800 = 280$$

$$\text{CP} = \text{Rs. } 280$$

50. (c) According to question,



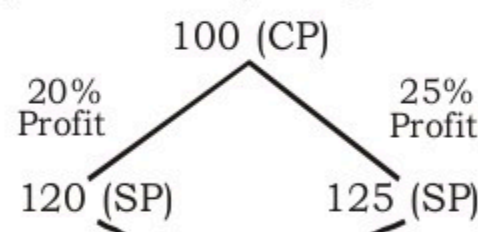
4 units difference = Rs. 80
[Given]

$$1 \text{ unit} \rightarrow 20$$

$$100 \text{ units} \rightarrow 20 \times 100 = \text{Rs. } 2000$$

CP of table = Rs. 2000

51. (b) According to question,



diff. 5 (increase)

$$5 \text{ units} \rightarrow 35$$

$$1 \text{ unit} \rightarrow 7$$

$$100 \text{ units} \rightarrow 7 \times 100 = \text{Rs. } 700$$

CP = Rs. 700

52. (b) According to question,

$$100 \text{ (CP)} \xrightarrow{20\% \text{ gain}} 120 \text{ (SP)}$$

If he sell double the price means $\text{SP} = 120 \times 2 = 240$

$$\text{Profit}\% = \frac{140}{100} \times 100 = 140\%$$

53. (a) According to question,

$$100 \text{ (CP)} \xrightarrow{10\% \text{ profit}} 110 \text{ (SP)} \xrightarrow{\times 9} 990$$

(Given)

$$110 \text{ units} \rightarrow 990, 1 \text{ unit} \rightarrow 9$$

$$100 \text{ units} \rightarrow 9 \times 100 = 900$$

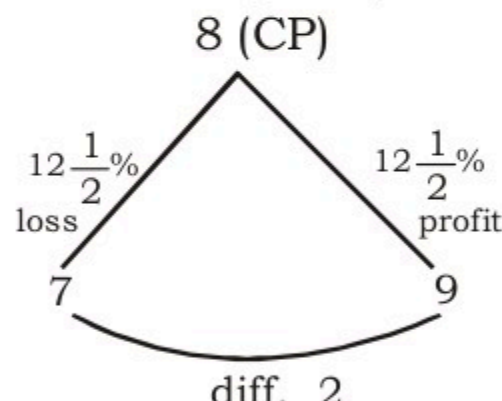
CP = Rs. 900

Now SP = Rs. 890

$$\therefore \text{loss} = \text{CP} - \text{SP} = 900 - 890 = \text{Rs. } 10 \text{ loss}$$

54. (c) Let the CP = 8 units

According to question,



$$2 \text{ units} \rightarrow 13$$

$$1 \text{ unit} \rightarrow \frac{13}{2}$$

$$8 \text{ units} \rightarrow \frac{13}{2} \times 8 = \text{Rs. } 52$$

55. (b) Let CP of the article = Rs. x

According to question,

$$\frac{x-50}{x} \times 100 = \frac{70-x}{x} \times 100$$

$$2x = 120$$

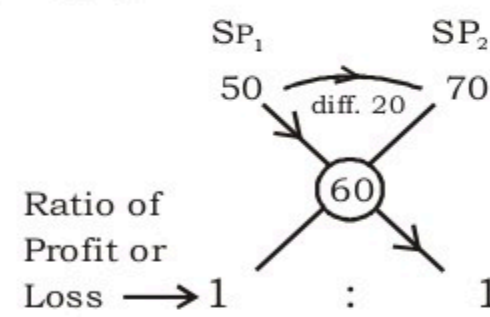
$$x = 60$$

$$\therefore \text{CP} = \text{Rs. } 60$$

$$\text{SP} = 50$$

$$\text{loss}\% = \frac{10}{60} \times 100 = \frac{100}{6} = 16\frac{2}{3}\%$$

Alternate:-



Ratio of Profit or Loss $\rightarrow 1 : 1$

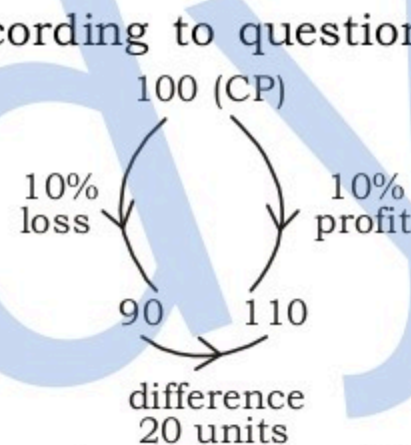
If CP = Rs. 60

SP = Rs. 50

$$\text{Loss}\% = \frac{10}{60} \times 100 = 16\frac{2}{3}\%$$

56. (a) Let CP of the article = 100 units

According to question,



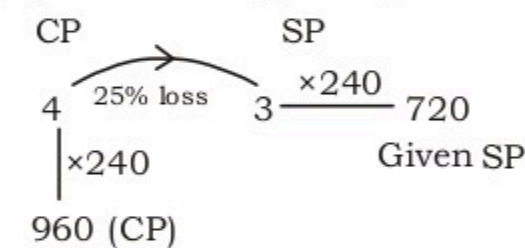
$$20 \text{ units} \rightarrow \text{Rs. } 10$$

$$1 \text{ unit} \rightarrow \frac{1}{2}$$

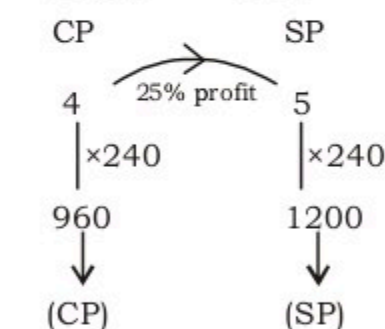
$$100 \text{ units} \rightarrow \frac{1}{2} \times 100 = 50$$

\therefore CP of the article is = Rs. 50

57. (a) According to question,

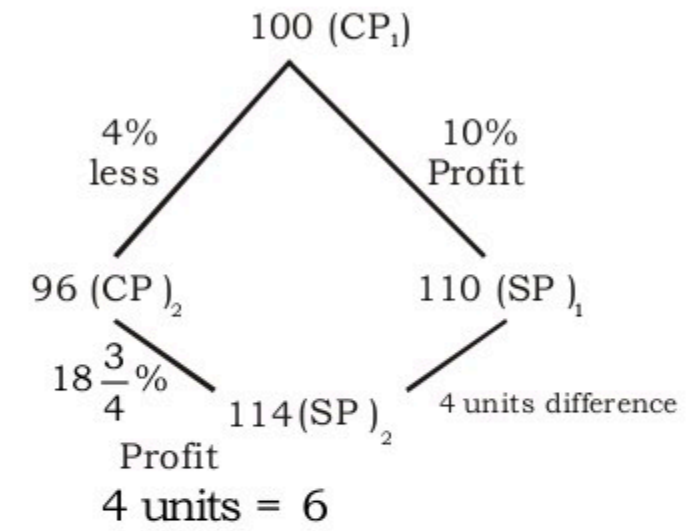


Now to gain 25%



$$\therefore \text{SP} = \text{Rs. } 1200$$

58. (c) Let CP of the book = 100 units



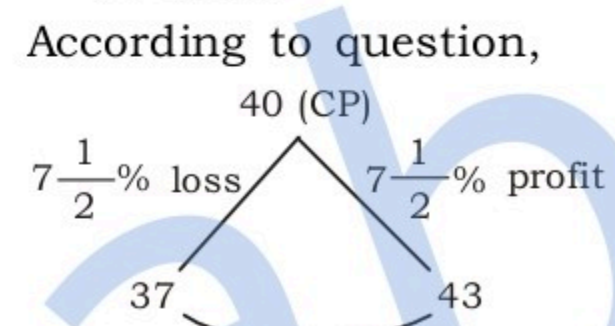
$$1 \text{ unit} = \frac{6}{4}$$

$$100 \text{ units} = \frac{6}{4} \times 100 = 150$$

$$\left[18\frac{3}{4}\% = \frac{3}{16} = 96 + \frac{3}{16} \times 96 = 114 \right]$$

59. (b) Let CP of the article = 40 units

According to question,



$$6 \text{ units} \rightarrow \text{Rs. } 3$$

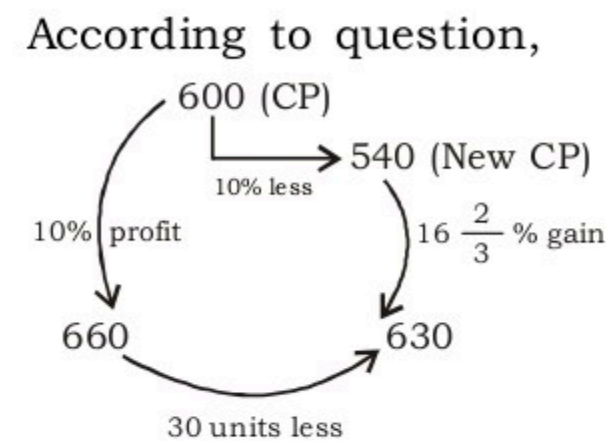
$$1 \text{ unit} \rightarrow \frac{3}{6} \times 1 = \frac{1}{2}$$

$$40 \text{ units} \rightarrow \frac{1}{2} \times 40 = 20$$

CP = Rs. 20

60. (c) Let CP of the commodity = 600 Unit

According to question,



$$30 \text{ units} \rightarrow \text{Rs. } 2$$

$$1 \text{ unit} \rightarrow \frac{2}{30}$$

$$600 \text{ units} \rightarrow \frac{2}{30} \times 600 = 40$$

CP of the article = Rs. 40

61. (b) Let CP of watch = 100 and SP = 125

percentage of profit on SP

$$= \frac{25}{125} \times 100 = 20\%$$

62. (c) Let SP = Rs. x
According to question,

$$\left(\frac{CP - x}{CP}\right) \times 100 = \left(\frac{2x - CP}{CP}\right) \times 100$$

$$CP - x = 2x - CP$$

$$3x = 2CP$$

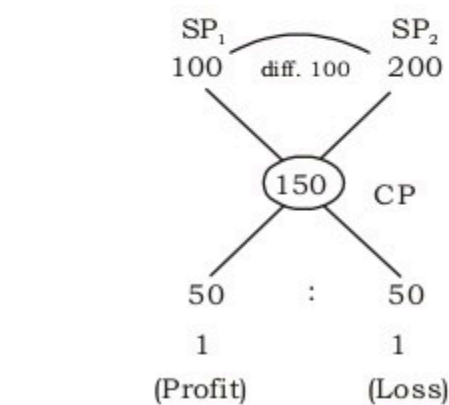
$$x = \frac{2}{3} CP$$

$$SP = \frac{2}{3} CP$$

$$\frac{SP}{CP} = \frac{2}{3} > 1 \text{ unit loss}$$

$$\text{loss}\% = \frac{1}{3} \times 100 = 33\frac{1}{3}\%$$

Alternate:-



CP \rightarrow 150
loss \rightarrow 50

$$\text{loss}\% \rightarrow \frac{50}{150} \times 100 = 33\frac{1}{3}\%$$

63. (a) Let CP of the article = Rs. 100
According to question,
 100 (CP) $\xrightarrow{10\% \text{ profit}}$ 110 (SP)
 Now CP becomes = 110
 110 (CP) $\xrightarrow{10\% \text{ loss}}$ 99 (SP)
 $\therefore \text{loss} = CP - SP$
 $= 100 - 99 = 1$
 $\text{loss}\% = \frac{1}{100} \times 100 = 1\%$

Alternate

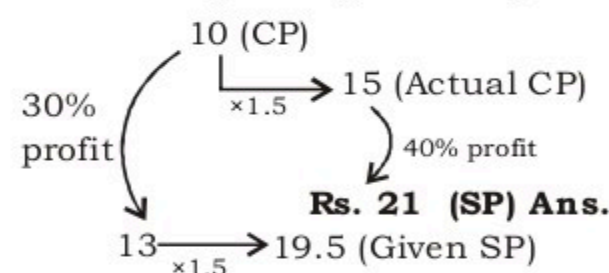
According to question,

$$= a - b - \frac{ab}{100}$$

$$= 10 - 10 - \frac{10 \times 10}{100}$$

$$= -1\% \text{ [(-) sign shows loss]}$$

64. (a) Let the CP of the basket = 10 unit
According to question,



Rs. 21 (SP) Ans.

- 13 units \rightarrow 19.5
 1 unit \rightarrow 1.5
 10 units \rightarrow $1.5 \times 10 = 15$
 CP \rightarrow Rs. 15

$$\therefore \text{S.P.} = 15 \times \frac{140}{100} = 21$$

65. (d) According to question,
CP of the bedsheet = Rs. 450

$$\text{Profit} = 10\% \text{ on SP} = \frac{1 \rightarrow \text{Profit}}{10 \rightarrow \text{SP}}$$

$$\therefore CP = SP - \text{Profit}$$

$$CP = 10 - 1 = 9 \text{ units}$$

$$9 \text{ units} = 450$$

$$1 \text{ unit} = \frac{450}{9} = 50$$

$$10 \text{ units} = 50 \times 10 = 500$$

$$\therefore \text{SP} = \text{Rs. } 500$$

66. (c) Let the CP of the Article is
= Rs. 100

According to question,

$$100 \text{ (CP)} \xrightarrow{200\% \text{ profit}} 300 \text{ (SP)}$$

$$\text{Ratio of } \frac{CP}{SP} = \frac{100}{300} = \frac{1}{3}$$

67. (c) Let CP of the Article = Rs. 100

According to question,

$$100 \text{ (CP)} \xrightarrow{5\% \text{ profit}} 105 \text{ (SP)}$$

$$\text{Ratio of } \frac{SP}{CP} = \frac{105}{100} = \frac{21}{20}$$

68. (b) S.P. of cycle = Rs. 2850

$$\text{Profit}\% = 14\%$$

$$\text{C.P.} = \frac{\text{S.P.}}{(100 + P\%)} \times 100$$

$$CP = \frac{2850}{114} \times 100$$

$$\text{New profit}\% = 8\%$$

$$\text{New S.P.} = \text{C.P.} \times \frac{(100 + P\%)}{100}$$

$$= \frac{2850 \times 100}{114} \times \frac{108}{100} = \text{Rs. } 2700$$

69. (a) Let CP of the article is = 100 units
According to question,

$$100 \text{ (CP)} \xrightarrow{4\% \text{ loss}} 96 \text{ (SP)}$$

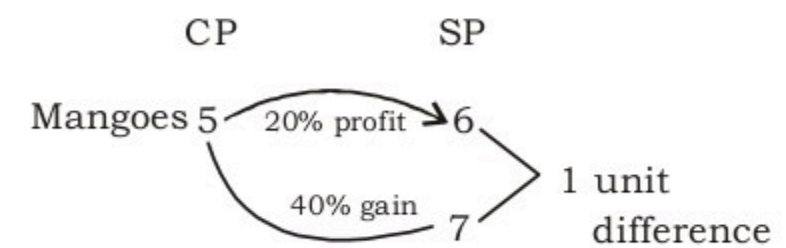
$$96 \text{ units} \rightarrow \text{Rs. } 960$$

$$1 \text{ unit} \rightarrow \frac{960}{96}$$

$$100 \text{ units} \rightarrow \frac{960}{96} \times 100 = 1000$$

$$CP = \text{Rs. } 1000$$

70. (a) According to question,



$$1 \text{ unit} = \text{Rs. } 1$$

\therefore SP of the mango in first case

$$= \text{Rs. } 6$$

71. (b) Let CP of Hand Cart
= 100

According to question,

$$100 \text{ (CP)} \xrightarrow{25\% \text{ loss}} 75$$

$$(\text{SP}) \times \frac{48}{5} = 720 \text{ (Given)}$$

$$75 \text{ units} = 720$$

$$1 \text{ unit} = \frac{720}{75} \Rightarrow \frac{48}{5}$$

$$100 \text{ units} = \frac{48}{5} \times 100 = 960$$

$$CP = \text{Rs. } 960$$

to gain 25% SP is

$$= CP + \text{Profit}\% \times CP$$

$$= 960 + \frac{25}{100} \times 960$$

$$= 960 + 240 = \text{Rs. } 1200$$

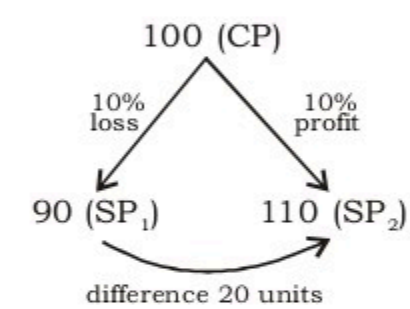
72. (b) According to question,
Cheats while buying = 10%
Cheats while selling = 10%

$$\therefore \left(a + b + \frac{ab}{100} \right)\%$$

$$= 10 + 10 + \frac{10 \times 10}{100} = 20 + 1$$

$$\text{Increase in profit}\% = 21\%$$

73. (b) Let CP of the book = 100
According to question,



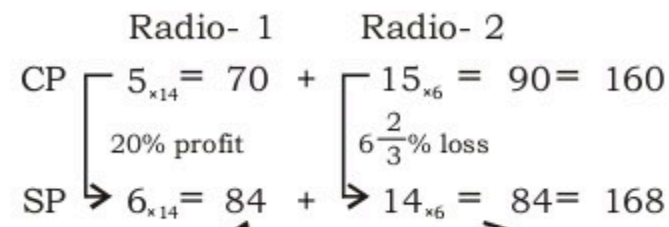
$$20 \text{ units} = \text{Rs. } 108$$

$$1 \text{ unit} = \text{Rs. } \frac{108}{20}$$

$$100 \text{ units} = \frac{108}{20} \times 100 = \text{Rs. } 540$$

$$CP = \text{Rs. } 540$$

74. (b) According to question,

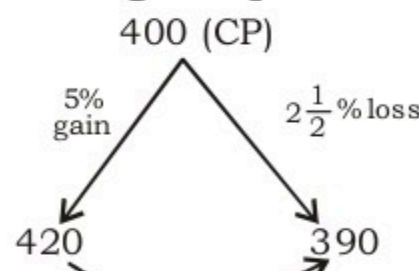


to make SP same
 160 units = 1920

$$1 \text{ unit} = \frac{1920}{160} = 12$$

70 units = $12 \times 70 = 840$
 90 units = $12 \times 90 = 1080$
 CP of both Radio
 = Rs. 840, Rs. 1080

75. (b) Let CP of the article = 400
 According to question,



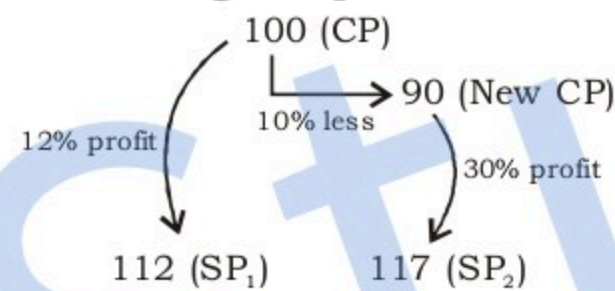
$$30 \text{ units} = 12$$

$$1 \text{ unit} = \frac{12}{30}$$

$$400 \text{ units} = \frac{12}{30} \times 400 = 160$$

CP of the article = Rs. 160

76. (c) Let the CP of the article = Rs. 100
 According to question,



$$5 \text{ units} = \text{Rs. } 5.75$$

$$1 \text{ unit} = \frac{5.75}{5} \times 100$$

$$100 \text{ units} = \frac{5.75}{5} \times 100 = 115$$

\therefore CP of the article = Rs. 115

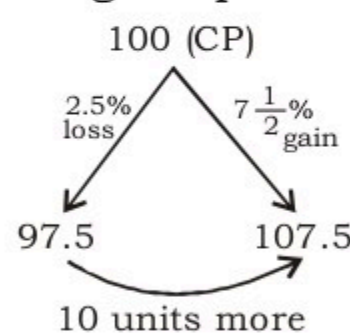
to gain 20%

\therefore SP of the article

$$= 115 + \frac{20}{100} \times 115$$

SP = Rs. 138 Ans.

77. (b) Let CP of the Radio = 100 unit
 According to question,



$$10 \text{ units} = 100$$

$$1 \text{ unit} = \frac{100}{10} = 10$$

$$100 \text{ units} = 100 \times 10 = 1000$$

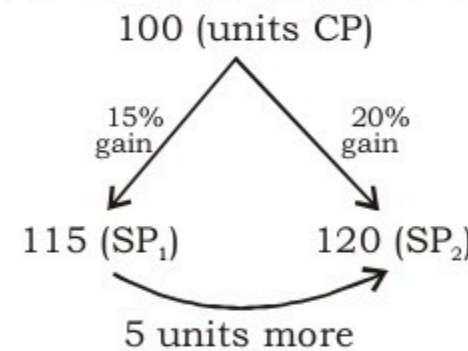
CP of the radio = Rs. 1000

to gain $12\frac{1}{2}\%$ SP of the radio

$$= 1000 + \frac{12.5}{100} \times 1000 = \text{Rs. } 1125$$

78. (c) Let CP of the article
 = 100 unit

According to question,



$$5 \text{ units} = 27$$

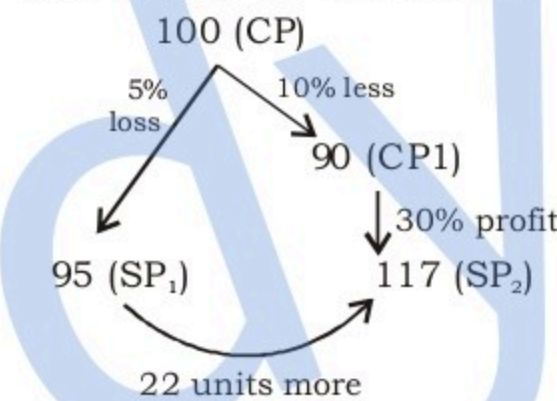
$$1 \text{ unit} = \frac{27}{5}$$

$$100 \text{ units} = \frac{27}{5} \times 100 = 540$$

CP of the article = Rs. 540

79. (c) Let CP of the article = 100

According to question,



$$22 \text{ unit} = 33$$

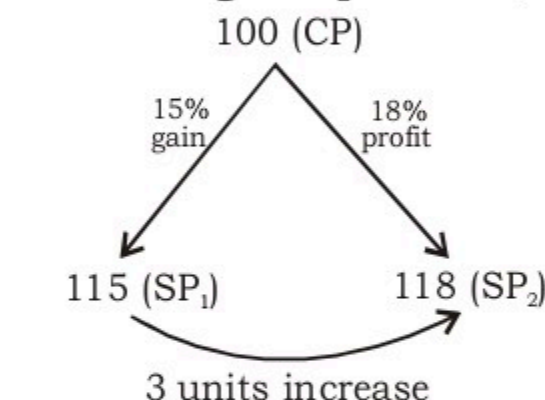
$$1 \text{ unit} = \frac{3}{2}$$

$$100 \text{ units} = \frac{3}{2} \times 100 = 150$$

\therefore CP = 150

80. (c) Let CP of the article = Rs. 100

According to question,



$$3 \text{ units} = 18$$

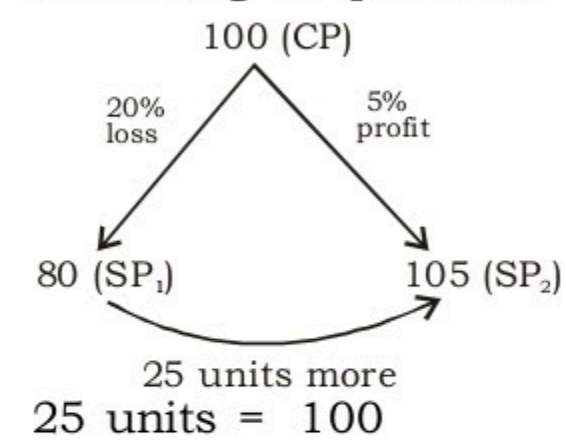
$$1 \text{ unit} = \frac{18}{3}$$

$$100 \text{ units} = \frac{18}{3} \times 100 = 600$$

\therefore CP of the article = Rs. 600

81. (c) CP of the article = 100

According to question,



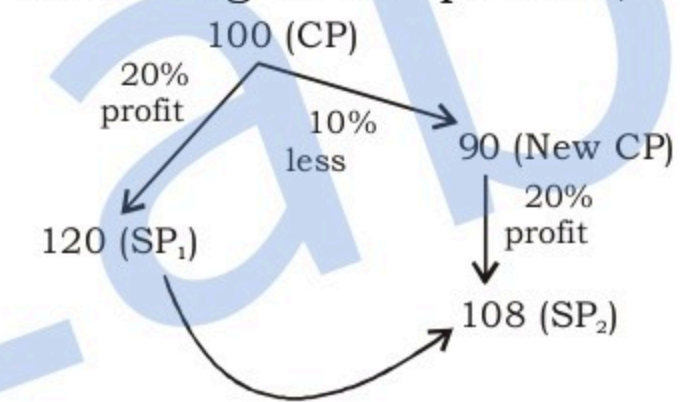
$$1 \text{ unit} = \frac{100}{25}$$

$$100 \text{ units} = \frac{100}{25} \times 100 = 400$$

CP = Rs. 400 Ans.

82. (a) 100
 10% Loss to 90
 20% profit to 120
 90 $\times 0.6$ = ₹54
 120 $\times 0.6$ = ₹72

83. (b) Let CP of the watch = 100
 According to the question,



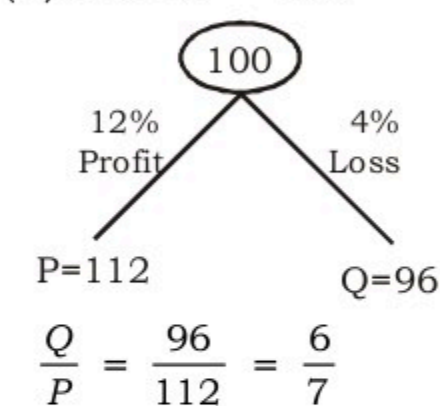
$$12 \text{ units} \rightarrow 30$$

$$1 \text{ unit} \rightarrow \frac{30}{12}$$

$$100 \text{ units} \rightarrow \frac{30}{12} \times 100 = 250$$

CP of the watch = Rs 250

84. (b) Let CP = 100



85. (b) \therefore profit 25% = $\frac{1}{4}$

Let CP = 4, profit = 1,
 SP = 4 + 1 = 5

If selling price is doubled

new SP = $5 \times 2 = 10$

\Rightarrow CP = 4, SP = 10

\Rightarrow profit = $10 - 4 = 6$ units

\Rightarrow Profit% will be = $\frac{6}{4} \times 100\%$
 = 150%

86. (d) C P = ₹ 1500
 Profit after selling
 = 25% of 1500 = ₹ 375
 Net profit
 = ₹ 375 - ₹ 75 = ₹ 300
 Net profit% = $\frac{300}{1500} \times 100 = 20\%$
87. (b) S.P of goods = Rs. 31
 C.P of goods = $31 \times \frac{100}{93}$
 = Rs. $\frac{100}{3}$
 Profit % = $\frac{35 - \frac{100}{3}}{\frac{100}{3}} \times 100$
 = $\frac{5}{3} \times 100 = 166\frac{2}{3}\%$
88. (d) According to question,
 Let CP of the article is = Rs. 100
 MP is 10% high of CP mean
 = Rs. 110
 Discount always given on
 Marked Price
 10% discount of MP means
 = $\frac{10}{100} \times 110 = \text{Rs. } 11$
 $\therefore \text{SP} = \text{MP} - \text{Discount}$
 $\text{SP} = 110 - 11 = \text{Rs. } 99$
 $\therefore \text{Loss\%} = \frac{\text{CP} - \text{SP}}{\text{CP}} \times 100$
 = $\frac{100 - 99}{100} \times 100 = \frac{1}{100} \times 100 = 1\%$
89. (c) According to question,
 $\frac{\text{CP}}{\text{SP}} = \frac{100}{120} > 20\% \text{ profit}$
 $\frac{\text{MP}}{\text{SP}} = \frac{100}{90} > 10\% \text{ Discount}$
 $\frac{\text{CP}}{\text{SP}} = \frac{100}{120} = \frac{5}{6}, \quad \frac{\text{MP}}{\text{SP}} = \frac{100}{90} = \frac{10}{9}$
 $\frac{\text{CP}}{\text{SP}} = \frac{5}{6}, \quad \frac{\text{MP}}{\text{SP}} = \frac{10}{9}$
 $\therefore \text{CP} \quad \text{SP} \quad \text{MP}$
 45 54 60
 9 units profit
 9 units \rightarrow 7500
 1 unit $\rightarrow \frac{7500}{9}$
 60 units $\rightarrow \frac{7500}{9} \times 60 = 50,000$
 MP = Rs. 50000

90. (d) According to question,
 CP : MP
 (100 - Discount) : (100 + profit)
 100 - 10 : 100 + 12
 90 : 112
 45 : 56 Ans.
91. (b) According to question,
 CP : MP
 (100 - Discount) : (100 + profit)
 100 - 15 : 100 + 19
 85 : 119
 $\frac{85}{119} : 1$
 34 unit more
 Raised% = $\frac{34}{85} \times 100 = 40\%$
92. (b) According to question,
 SP of TV = 16800
 Profit = 800
 CP = SP - Profit
 = 16800 - 800
 = Rs. 16000
 Now given 20% Discount on
 the labelled price
 $\frac{\text{MP}}{\text{SP}} = \frac{20}{17} \xrightarrow{\times 7} 119$
 MP = 20000
 SP (for Rita) = 16,000
 20% discount
 4000x 4x4000
93. (b) 15% = $\frac{3}{20}$ Discount
 $\frac{\text{MP}}{\text{SP}} = \frac{20}{17} \xrightarrow{\times 7} 119$
 MP = 20000
 SP = 16000
 4000x 4x4000
94. (a) According to question,
 CP : MP
 (100 - Discount) : (100 + Profit%)
 100 - 10 : 100 + 12.5
 90 units : 112.5 units
 90 units \rightarrow = 800
 1 unit $\rightarrow \frac{800}{90}$
 112.5 units $\rightarrow \frac{800}{90} \times \frac{1125}{10} = 1000$
 $\therefore \text{MP} = \text{Rs. } 1000$ Ans.
95. (d) According to question,
 $\frac{\text{MP}}{\text{SP}} = \frac{100}{77} > 23\% \text{ discount}$
 $\frac{\text{CP}}{\text{SP}} = \frac{10}{11} > 10\% \text{ profit}$

- to make SP same
 CP : SP : MP
 70 : 77 : 100
 7 units profit
 7 units \rightarrow 56
 1 unit \rightarrow 8
 100 units $\rightarrow 8 \times 100 = 800$
 MP = Rs. 800
96. (b) According to question,
 Marked Price = Rs. 300
 As we know that,
 Marked Price is 50% above the CP
 $\therefore \text{Cost Price} = \text{Rs. } 200$
Take Option:- (b)
 Original Selling Price = Rs. 250
 Profit = SP - CP
 = 250 - 200 = Rs. 50
 Now SP increase 20%
 New SP = Rs. 300
 Profit = 300 - 200 = Rs. 100
 Now Profit become double Rs.
 50 to Rs. 100
97. (c) 20% = $\frac{1}{5}$ Dis. M.P.
 M.P : S.P
 5 : 4 (After discount)
 5 \Rightarrow 150
 1 \Rightarrow 30
 S.P = 4 \times 30 = Rs. 120
98. (d) Let CP 100
 MP = 120% of CP
 Profit = 8%
 SP = 108
 So discount is = 120 - 108 = 12
 $\frac{12}{120} \times 100 = 10\%$
99. (a) According to question,
 CP : MP
 (100 - Discount%) : (100 + Profit%)
 100 - 12 : 100 + 32
 88 : 132
 44 units hike
 Hike% = $\frac{44}{88} \times 100 = 50\%$
100. (a) According to question,
 CP : MP
 (100 - Discount%) : (100 + Profit%)
 100 - 12 : 100 + 10
 88 : 110
 $\downarrow \times \frac{1915}{22}$ $\downarrow \times \frac{1915}{22}$
 Rs. 7660 (Given CP) Rs. 9575 (MP)

101. (a) According to question,
CP of 2000 books are = Rs. 70,000

$$\text{CP of 1 book is} = \frac{70000}{2000} = \text{Rs. } 35$$

Marked Price of 1 book = Rs. 75

Discount = 30%

Selling Price of 1 book = Rs. 52.5

He distribute 400 books free

$$\therefore \text{SP of 1600 books} = 52.5 \times 1600$$

$$= \text{Rs. } 84000$$

$$\text{Profit} = \text{SP} - \text{CP}$$

$$= 84000 - 70000$$

$$= \text{Rs. } 14000$$

$$\text{Profit\%} = \frac{14000}{70000} \times 100$$

$$= 20\% \text{ gain}$$

102. (d) Let the Marked Price = 100 unit
According to question,

$$100 \text{ (MP)} \xrightarrow{30\% \text{ discount}} 70 \text{ (SP)}$$

→ CP of retailer

CP of retailer = 70

Retailer sold at MP = 100

$$\text{Profit} = \text{MP} - \text{CP} = 100 - 70$$

$$= 30 \text{ units profit}$$

$$\text{Profit\%} = \frac{30}{70} \times 100 = 42\frac{6}{7}\%$$

103. (c) According to question,

$$\frac{\text{CP}}{\text{MP}} = \frac{100}{125} \rightarrow 25\% \text{ profit}$$

$$\frac{\text{MP}}{\text{SP}} = \frac{125}{105} \rightarrow 16\% \text{ discount}$$

$$\begin{array}{ccc} \text{CP} & \text{SP} & \text{MP} \\ 100 & 105 & 125 \end{array}$$

5% profit → Ans.

104. (b) According to question,

$$\frac{\text{MP}}{\text{SP}} = \frac{100}{80} \rightarrow 20\% \text{ discount}$$

$$80 \text{ units} = 64$$

$$1 \text{ unit} = \frac{64}{80}$$

$$100 \text{ units} = \frac{64}{80} \times 100 = 80$$

∴ Original Price = Rs. 80

105. (d) Let CP of article = 100

$$\text{Profit\%} = 25\%$$

$$\frac{\text{CP}}{\text{SP}} = \frac{100}{125} \rightarrow 25\% \text{ profit}$$

$$\begin{array}{ccc} \text{C.P.} & & \text{S.P.} \\ 100 & & 125 \\ \downarrow \times 70 & & \downarrow \times 70 \\ 7000 & & 8750 \end{array}$$

$$\frac{\text{CP}}{\text{MP}} = \frac{70}{100} \rightarrow 30\% \text{ profit}$$

$$\begin{array}{ccc} \text{C.P.} & & \text{M.P.} \\ 70 & & 100 \\ \downarrow \times 100 & & \downarrow \times 100 \\ 7000 & & 10000 \end{array}$$

106. (c) According to question,

$$\begin{array}{ccc} \text{CP} & \text{SP} & \text{MP} \\ 100 & 92 & 115 \\ \swarrow & \nearrow & \nearrow \\ & 20\% \text{ discount} & \\ & 115 & \\ \nwarrow & \nwarrow & \\ & 15\% \text{ above} & \end{array}$$

8% loss Ans.

107. (d) Let MP of the Saree = 100
According to question,

$$100 \text{ (MP)} \xrightarrow{5\% \text{ discount}} 95 \text{ (SP)}$$

$$95 \text{ units} = 266$$

$$1 \text{ unit} = \frac{266}{95}$$

$$100 \text{ units} = \frac{266}{95} \times 100 = 280$$

$$\therefore \text{MP} = 280$$

Now he sold at the MP they have
Profit 12% on CP

Let CP of the saree = 100

$$100 \text{ (CP)} \xrightarrow{12\% \text{ profit}} 112 \text{ (SP)}$$

$$112 \text{ units} = 280$$

$$1 \text{ unit} = \frac{280}{112}$$

$$100 \text{ units} = \frac{280}{112} \times 100 = 250$$

∴ CP of the saree = Rs. 250

108. (a) Let the marked Price = 100
According to question,

$$\begin{array}{ccc} & 100 \text{ (MP)} & \\ \swarrow 30\% \text{ less} & & \searrow (100-98) \text{ 2 units loss} \\ 70 \text{ (SP}_1\text{)} & & 98 \text{ (SP}_2\text{)} \\ \nwarrow & \nearrow & \\ & 40\% \text{ profit on SP}_1 & \end{array}$$

$$\text{Loss\%} = \frac{2}{100} \times 100 = 2\%$$

109. (c) Let MP of the article = 100
According to question,

$$\frac{\text{MP}}{\text{SP}} = \frac{100}{90} \rightarrow 10\% \text{ discount}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{100}{117} \rightarrow 17\% \text{ profit}$$

to make SP same

$$\begin{array}{ccc} \text{CP} & \text{SP} & \text{MP} \\ 9000 & 10530 & 11700 \end{array}$$

2700 profit

$$\text{Profit\%} = \frac{2700}{9000} \times 100 = 30\%$$

Alternate

$$\begin{array}{cc} \text{CP} & \text{MP} \\ 100-D\% & 100+P\% \end{array}$$

$$100-10\% \quad 100+17\%$$

$$90 \quad 117$$

$$10 \quad 13$$

30% more

$$\text{Profit\%} = 30\%$$

110. (c) According to question,

$$\frac{\text{MP}}{\text{CP}} = \frac{13}{10} \rightarrow 30\% \text{ more}$$

$$\frac{\text{MP}}{\text{SP}} = \frac{16}{15} \rightarrow 6\frac{2}{3}\% \text{ discount}$$

to make MP same.

$$\begin{array}{ccc} \text{CP} & \text{SP} & \text{MP} \\ 160 & 195 & 208 \end{array}$$

35 units profit

$$\text{Profit\%} = \frac{35}{160} \times 100 = 21\frac{7}{8}\%$$

111. (d) According to question,

$$\frac{\text{CP}}{\text{MP}} = \frac{10}{13} \rightarrow 30\% \text{ Raised}$$

$$\frac{\text{MP}}{\text{SP}} = \frac{25}{23} \rightarrow 8\% \text{ discount}$$

to make MP same

$$\begin{array}{ccc} \text{CP} & \text{SP} & \text{MP} \\ 250 & 299 & 325 \end{array}$$

49 units profit

$$\text{profit\%} = \frac{49}{250} \times 100 = 19.6\% \text{ Ans.}$$

112. (d) Given, M.P = Rs. 975

$$\Rightarrow \text{Selling price} = 897$$

$$\Rightarrow \text{discount} = \text{MP} - \text{SP}$$

$$\Rightarrow \text{discount} = 975 - 897 = 78$$

$$\Rightarrow \text{Then discount \%}$$

$$= \frac{\text{discount}}{\text{mark price}} \times 100$$

$$= \frac{78}{975} \times 100 \Rightarrow \text{discount \%} = 8\%$$

113. (c) According to first condition total discount

$$= a + b - \frac{ab}{100}$$

$$= 40 + 30 - \frac{40 \times 30}{100} = 70 - 12$$

In first condition total discount = 58% ... (i)

In second condition total discount

$$= 45\% + 20\% - \frac{45 \times 20}{100}$$

$$\Rightarrow \text{total discount} = 56\%$$

\Rightarrow According to question,

$$\Rightarrow 58\% - 56\% = \text{Rs. } 12$$

$$\Rightarrow 2\% = 12 \Rightarrow 1\% = 6$$

$$\Rightarrow 100\% = 600$$

\therefore mark price will be Rs. 600

114. (d) According to the question,

First discount 10%

$$\downarrow -10$$

₹ 90

Second discount 20%

$$\downarrow -18$$

Cost price ₹ 72

Transportation charge 10%

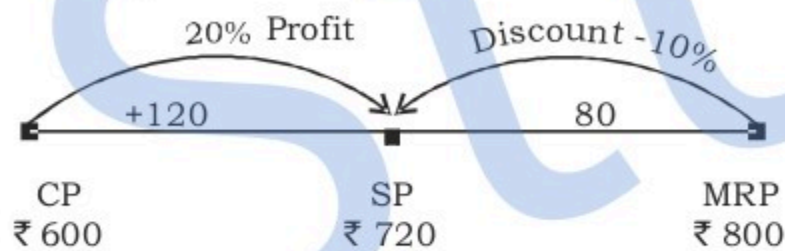
$$\downarrow +7.2$$

Actual cost price ₹ 79.2

Profit% 15% $\downarrow +11.88$

Therefore, S. P. will be = ₹ 91.08

115. (a)



$$\Rightarrow CP \times \frac{120}{100} = SP$$

$$\Rightarrow 600 \times \frac{6}{5} = 720$$

$$\Rightarrow SP \times \frac{100}{90} = MP$$

$$\Rightarrow 720 \times \frac{100}{90} = 800$$

$$\Rightarrow \text{MRP} = ₹ 800$$

116. (d) Equivalent discount

$$= \left(a + b - \frac{ab}{100} \right)\%$$

$$= \left(10 + 20 - \frac{10 \times 20}{100} \right)\%$$

$$= (30 - 2)\% = 28\%$$

117. (c) MRP \rightarrow ₹ 720

First discount - 10% $\downarrow - 72$

648

II discount \rightarrow } 97.2

$$(648 - 550.8) = 97.2$$

Find S.P = 550.80

$$\Rightarrow \text{discount}\% = \frac{97.2}{648} \times 100 = 15\%$$

118. (c) Total discount %

$$= \left(20 + 15 - \frac{20 \times 15}{100} \right)\%$$

$$\Rightarrow 35 - 3 = 32\%$$

$$\Rightarrow 32\% = \frac{32}{100} \text{ — discount}$$

$$\text{MRP} \quad \text{discount} \quad \text{SP}$$

$$100 \quad 32 \quad 68$$

$$68 \text{ units} \quad 3060$$

$$\Rightarrow 1 \text{ unit} \quad 45$$

$$\Rightarrow \text{then MRP} = 100 \text{ units}$$

$$= 45 \times 100 = ₹ 4500$$

119. (c) Given

$$\Rightarrow \text{MRP of book} = \text{Rs. } 100$$

$$\Rightarrow \text{SP of 3 books} = \text{Rs. } 274.50$$

$$\Rightarrow \text{SP of 1 book} = \text{Rs. } 91.50$$

$$\Rightarrow \text{Discount on each book}$$

$$= 100 - 91.50 = \text{Rs. } 8.5$$

$$\Rightarrow \text{Therefore discount \%}$$

$$= \frac{8.5}{100} \times 100\% = 8.5\%$$

120. (b) $5\% = \frac{1}{20} \leftarrow D$

$$\text{So, SP} = 19$$

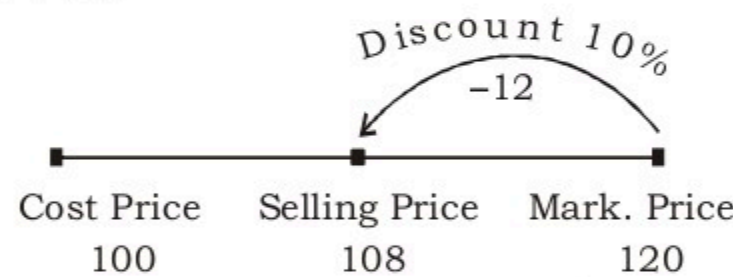
$$\text{MP} = 20$$

$$\text{SP} = 19$$

$$\downarrow \times 50$$

$$1000 \quad 950$$

121. (d)



$$108 \text{ units} = 216$$

$$1 \text{ unit} = 2$$

$$\text{CP} = 100 \text{ units} = 100 \times 2 = \text{Rs. } 200$$

122. (d) According to the question,

$$\frac{\text{Cost price}}{\text{Mark price}} = \frac{5}{9}, \quad \frac{\text{Cost price}}{\text{Selling price}} = \frac{5}{6} \quad \left[20\% \text{ profit} \right]$$

$$\begin{array}{ccc} \text{Cost Price} & \text{Selling Price} & \text{Mark Price} \\ 5 & 6 & 9 \end{array}$$

3 unit discount

$$\text{Discount}\% = \frac{3}{9} \times 100 = 33\frac{1}{3}\%$$

123. (b) Let CP = 100x

$$\text{Discount} = 20\%$$

$$\text{SP} = 100x - 20\% \text{ of CP} \Rightarrow 80x$$

According to the question,

$$80x \rightarrow ₹ 300$$

$$1x \rightarrow \frac{300}{80} \times 100$$

$$100x \rightarrow \frac{300}{80} \times 100 = 375$$

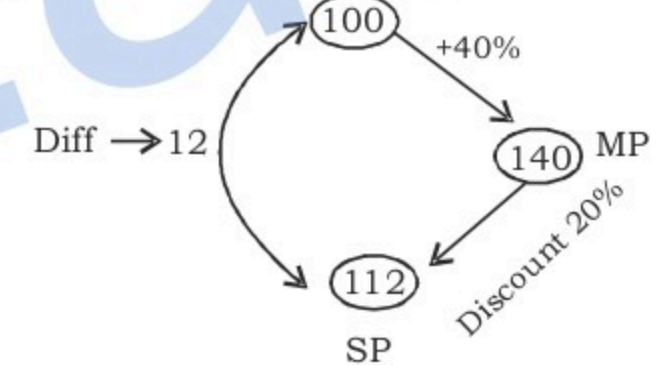
$$\text{Actual CP} = ₹ 375$$

$$\text{New SP} = ₹ 405$$

$$\text{Profit} = ₹ 30$$

$$\text{Gain percent} = \frac{30}{375} \times 100 = 8\% \text{ Ans.}$$

124. (b)



Let CP be 100

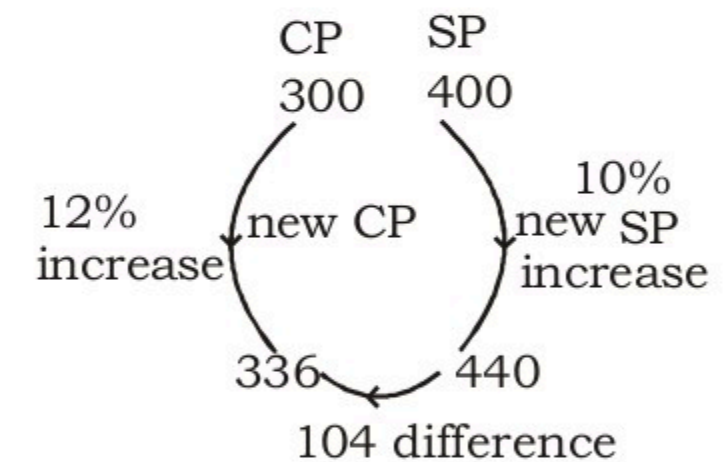
$$12 \text{ units} \rightarrow \text{Rs. } 48$$

$$1 \text{ unit} \rightarrow \text{Rs. } 4$$

$$100 \text{ units} \rightarrow 4 \times 100 = \text{Rs. } 400$$

125. (b) $33\frac{1}{3}\% = \frac{1}{3} \rightarrow P$

$$\begin{array}{cc} \text{CP} & \text{SP} \\ 3 & 4 \end{array}$$



$$\text{Profit \%} = \frac{104}{336} \times 100 = 30\frac{20}{21}\%$$

126. (d) $\begin{array}{ccc} \text{MP} & & \text{SP} \\ 250 & & 225 \\ & \searrow & \nearrow \\ & -25 & \end{array}$

Discount $\Rightarrow \frac{25}{250} \times 100 = 10\%$

127. (c) According to the question

$\frac{\text{M.P.}}{\text{S.P.}} = \frac{50}{40} \Rightarrow 20\% \text{ discount}$

If S.P. = 40
to gain 40% New S.P.

$= 40 \times \frac{140}{100} = \text{Rs. } 56$

% profit on the marked price

$= \frac{6}{50} \times 100 = 12\%$

128. (c) Discount = $x\%$

$\Rightarrow \text{SP} = \text{Rs. } y$

$\Rightarrow \text{MRP} = ?$

$\Rightarrow \text{MRP} \times (100 - x)\% = y$

$\Rightarrow \text{MRP} = \frac{y}{(100 - x) \times \frac{1}{100}}$

$\Rightarrow \text{MRP} = \text{Rs. } \frac{100y}{(100 - x)}$

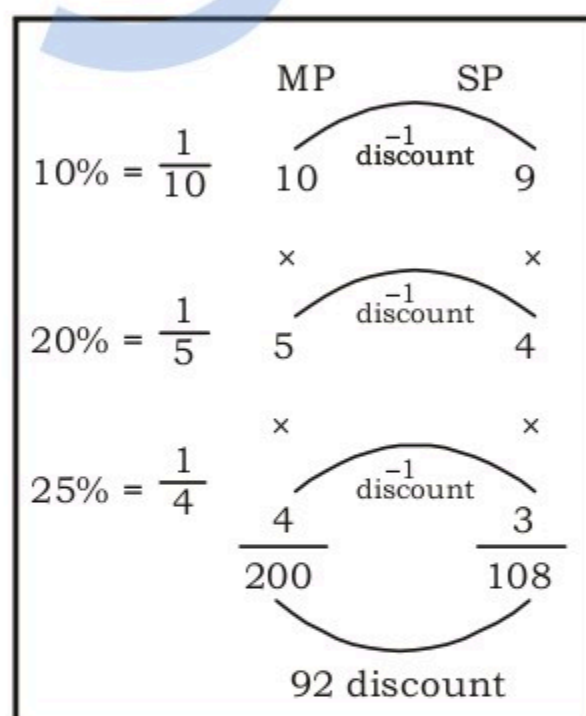
129. (a) Successive discount of 10% and 20%

$= 10 + 20 - \frac{10 \times 20}{100} = 28\%$

Successive discount of 28% and 25%

$= 28 + 25 - \frac{28 \times 25}{100} = 53 - 7 = 46\%$

Alternate



Discount % = $\frac{D}{\text{MP}} \times 100$

$= \frac{92}{200} \times 100 = 46\%$

130. (d) $\begin{array}{ccc} \text{CP} & & \text{MP} \\ 100 - D\% & & 100 + P\% \\ 90 & & 126 \\ & \searrow & \nearrow \\ & 36 & \end{array}$

Required % = $\frac{36}{90} \times 100 = 40\%$

TYPE E

131. (d) According to question,

$\begin{array}{ccc} \text{A} & \xrightarrow{20\% \text{ profit}} & \text{B} \\ 10 & & 12 \end{array} \xrightarrow{25\% \text{ profit}} \begin{array}{c} \text{C} \\ 12 + 3 = 15 \end{array} \downarrow 225$

$\therefore 1 \text{ unit} = 15$

$\therefore 10 \text{ unit} = 10 \times 15 = \text{Rs. } 150$

132. (c) According to question,

$\begin{array}{ccc} \text{X} & & \text{Y} \\ 100 & \xrightarrow{\text{gain } 5\%} & 105 \end{array} \begin{array}{c} \text{X gain} \\ \text{5 units} \end{array}$
 $\begin{array}{ccc} \text{X losses} & & \text{Y} \\ 102.9 & \xleftarrow{\text{loss } 2\%} & 105 \end{array} \begin{array}{c} \text{X losses} \\ \text{2.9 units} \end{array}$

\therefore In whole transaction gain in whole

$= 105 - 102.9 = 2.1 \text{ units}$

But, 100 units = 1,50,000

1 unit = 1500

2.1 units = 3150 gain

133. (c) According to question,

$\begin{array}{ccc} \text{CP} & & \text{SP} \\ \text{Manufacturer gains} & \rightarrow & 10 \xrightarrow{10\% \text{ profit}} 11 \\ \text{Wholesaler gains} & \rightarrow & 20 \xrightarrow{15\% \text{ profit}} 23 \\ \text{Retailer gains} & \rightarrow & 4 \xrightarrow{25\% \text{ profit}} 5 \end{array}$
 $\begin{array}{ccc} 800 & & 1265 \\ & \searrow & \nearrow \\ & 1265 \text{ (Given)} & \end{array}$

$\therefore 800 \times 1 = \text{Rs. } 800 \text{ (CP)}$

134. (c) Let CP of the camera

$= 100 \text{ unit}$

$\begin{array}{ccc} & 100 & \\ 20\% \text{ less} \swarrow & & \searrow 12\% \text{ increase} \\ \text{Purchase } 80 & & 112 \\ & \nearrow 40\% \text{ profit} & \end{array}$

12% profit

135. (c) According to question,

A \rightarrow Manufacturer

B \rightarrow Wholesale dealer

C \rightarrow Shopkeeper

D \rightarrow Customer

$\therefore \begin{array}{ccc} \text{A} & \xrightarrow{10\% \text{ Profit}} & \text{B} \\ 10 & & 11 \\ & \searrow & \nearrow \\ & 5 & 6 \\ & \searrow & \nearrow \\ & 20 & 17 \\ & \searrow & \nearrow \\ & 1000 & 1122 \\ & \searrow & \nearrow \\ & \text{Rs. } 50000 & \text{Rs. } 56100 \text{ (Given)} \end{array}$

136. (a) According to question,

$\begin{array}{ccc} \text{A} & \xrightarrow{10\% \text{ Profit}} & \text{B} \\ 10 & & 11 \\ & \searrow & \nearrow \\ & 5 & 6 \\ & \searrow & \nearrow \\ & 50 & 66 \\ & \searrow & \nearrow \\ & \text{CP of A} & \text{CP of C} \end{array}$

66 units = 264

1 unit = $\frac{264}{66}$

50 units = $\frac{264}{66} \times 50 = 200$

CP of A = Rs. 200

137. (c) According to question,

$\begin{array}{ccc} \text{A} & \xrightarrow{19\% \text{ loss}} & \text{B} \\ 100 & & 81 \\ & \searrow & \nearrow \\ & 60 \times 1 & 81 \times 60 \\ & \searrow & \nearrow \\ & \text{CP } 6000 & 4860 \rightarrow \text{SP (Given)} \\ & \searrow & \nearrow \\ & \text{Rs. } 1020 & \text{diff.} = 1140 \end{array}$

Now B sold to C at price that would given A profit of 17%.

Total gain of B

$= \text{Rs. } 1020 + 1140 = \text{Rs. } 2160$

CP of B = Rs. 4860

Gain% = $\frac{2160}{4860} \times 100 = 44\frac{4}{9}\%$

138. (b) According to question,

Shopkeeper sells his goods at Cost price

Let, CP of 1000 gms good

$= \text{Rs. } 1000$

He Sold 900 gms good

SP of 900 gms good = Rs. 1000

CP of 900 gms good = Rs. 900

Profit% = $\frac{100}{900} \times 100 = 11\frac{1}{9}\%$

139. (c) According to question,
A shopkeeper fault while buying as well as selling and makes a profit of 5%

$$\therefore \left(a + b + \frac{ab}{100} \right) \% = 5 + 5 + \frac{5 \times 5}{100}$$

$$= 10 + \frac{1}{4}$$

Increase in profit = 10.25%

140. (d) Let the CP of the car = 100 units
According to question,

$$\begin{array}{ccc} 100 & \text{(CP)} & \xrightarrow{10\% \text{ loss}} 90 \\ (\text{SP}_1) & \xrightarrow{20\% \text{ profit}} & 108 (\text{SP}_2) \\ 108 \text{ units} & = & 54000 \end{array}$$

$$1 \text{ unit} = \frac{54000}{108} = 500$$

$$100 \text{ units} = 500 \times 100$$

$$= \text{Rs. } 50000$$

CP of the car = Rs. 50000

141. (c) According to question,

$$\begin{array}{ccc} A & \xrightarrow{10\% \text{ profit}} & B \\ 10 & \downarrow \times 260 & 11 \\ & \boxed{2600} & 2860 \end{array}$$

142. (d) According to the question.

$$\begin{array}{ccc} A & \xrightarrow{20\% \text{ Profit}} & B \rightarrow 5 \\ & \downarrow \times 4 & \downarrow \times 6 \\ B & \xrightarrow{25\% \text{ Profit}} & C \rightarrow 4 \\ & \downarrow \times 20 & \downarrow \times 3 \\ & \text{C.P. of A} & \text{C.P. of C} \\ 18 \text{ units} & \rightarrow & P \\ 1 \text{ unit} & \rightarrow & \frac{P}{18} \\ 20 \text{ units} & \rightarrow & \frac{P}{18} \times 20 = \frac{10P}{9} \\ \therefore \text{C.P. of A} & = & \text{Rs. } \frac{10P}{9} \end{array}$$

143. (b) According to question 15% loss,

$$\begin{array}{ccc} \text{CP} & \text{Loss} & \text{SP} \\ 100 & 15 & 85 \\ \downarrow \times 14 & & \downarrow \times 14 \\ 1400 & & 1190 \rightarrow \text{Ans.} \end{array}$$

144. (d) According to question 7% loss,

$$\begin{array}{ccc} \text{CP} & \text{Loss} & \text{SP} \\ 100 & 7 & 93 \\ \downarrow \times 7 & & \downarrow \times 7 \\ 700 & & 651 \end{array}$$

(Ans.)

145. (d) According to question,
Two successive discounts of 5%
Equivalent discount

$$= a + b - \frac{ab}{100}$$

$$= 5 + 5 - \frac{5 \times 5}{100} = 10 - \frac{25}{100} = \frac{39}{4} \%$$

MP = Rs. 80

$$\text{Discount} = 80 \times \frac{39}{4 \times 100} = \text{Rs. } 7.8$$

$$\text{SP} = \text{MP} - \text{Discount} = \text{Rs. } (80 - 7.8)$$

$$= \text{Rs. } 72.2$$

146. (a) According to question,

$$\begin{array}{ccc} \text{CP} & & \text{SP} \\ \text{I} & 4 \text{ --- } 5 & (25\% \text{ profit first time}) \\ \text{II} & 4 \text{ --- } 5 & \\ \text{II} & \frac{4}{64} \text{ --- } \frac{5}{125} & \\ & \downarrow \times 2 & \downarrow \times 2 \\ & 128 & 250 \text{ (Given)} \end{array}$$

$$\therefore \text{CP} = \text{Rs. } 128$$

147. (b) According to question,

$$\begin{array}{ccc} \text{Original} & & \text{Reduced Price} \\ \text{Price} & 5 \xrightarrow{20\% \text{ reduction}} & 4 \\ \text{Consumption} & 4 \xrightarrow{1 \text{ unit increase}} 5 & \\ & \downarrow \times 4 & \downarrow \times 4 \\ & 16 \text{ kg} & 20 \text{ kg} \\ & & 4 \text{ kg} \end{array}$$

$$\text{Reduced price of Salt} = \text{Rs. } \frac{100}{20}$$

= Rs. 5/kg.

148. (b) According to question,

$$\begin{array}{ccc} 10 & \xrightarrow{10\% \text{ reduced}} & 9 \\ & \downarrow \times 1 & \downarrow \times 1 \\ & 10 & 9 \end{array}$$

To back to original salary it must be raised 1 unit %

$$= \frac{1}{9} \times 100 = 11\frac{1}{9} \%$$

149. (c) According to question,

$$\begin{array}{ccc} & \text{Cut } 10\% & \\ 10 & \xrightarrow{\quad} & 9 \\ & \downarrow \text{increase } 1 \text{ unit} & \\ \text{Raised } \% & = & \frac{1}{9} \times 100 \\ & = & 11\frac{1}{9} \% \end{array}$$

150. (d) According to question,

$$\begin{array}{ccc} \text{Price} & 5 \xrightarrow{20\% \text{ increase}} & 6 \\ \text{Commodity} & 6 \xrightarrow{1 \text{ unit less}} 5 & \\ & \downarrow \times 4 & \downarrow \times 4 \\ & 24 \text{ mangoes} & 20 \text{ mangoes} \\ & & 4 \text{ mangoes} \end{array}$$

$$24 \text{ mangoes CP} = \text{Rs. } 40$$

$$1 \text{ mango} = \frac{40}{24}$$

$$15 \text{ mangoes CP} = \frac{40}{24} \times 15 = \text{Rs. } 25$$

151. (b) According to question,

$$\begin{array}{ccc} \text{Price} & 5 \xrightarrow{20\% \text{ reduction}} & 4 \\ \text{Commodity} & 4 \xrightarrow{1 \text{ unit increase}} 5 & \\ & \downarrow \times 5 & \downarrow \times 5 \\ & 20 \text{ kg} & 25 \text{ kg} \end{array}$$

$$1 \text{ unit} \rightarrow 5 \text{ kg}$$

$$4 \text{ units} \rightarrow 5 \times 4 = 20 \text{ kg}$$

$$5 \text{ units} \rightarrow 5 \times 5 = 25 \text{ kg}$$

Original price of sugar per kg.

$$= \frac{600}{20} = 30 \text{ Rs./kg}$$

152. (c) According to question,

$$\text{Total gain} = a + b + \frac{ab}{100}$$

$$= 20 + 30 + \frac{20 \times 30}{100} = 56\%$$

$$153. (b) 20\% = \frac{1}{5}, 10\% = \frac{1}{10}$$

$$\begin{array}{ccc} \text{MP} & & \text{SP} \\ 5 & & 4 \\ \hline 10 & & 9 \\ \hline 50 & : & 36 \end{array}$$

$$50 \text{ Units} = 900$$

$$36 \text{ Units} = \frac{900}{50} \times 36$$

$$= 36 = 648$$

154. (a) According to question,

$$\text{Grocer use } 20\% \text{ less weight}$$

$$= 1000 - 200 = 800 \text{ gm}$$

$$\text{The profit\%} = \frac{200}{800} \times 100 = 25\%$$

Then total profit

$$= 10 + 25 + \frac{25 \times 10}{100} = 37.5\%$$

155. (b) According to question,

Dishonest dealer sold at CP
uses a false weigh of 850 gm
instead to 1 kg

$$\therefore \text{Profit\%} = \frac{150}{850} \times 100$$

$$= 17\frac{11}{17} \% \text{ profit}$$

156. (a) According to question,

$$\begin{array}{ccc} \text{Goat-1} & \text{Goat-2} & \text{Total} \\ \text{CP} & \left[\begin{array}{l} 5_{.9} = 45 + 25 \\ 20\% \text{ loss} \end{array} \right] & \text{Rs. } 70 \\ \text{SP} & \left[\begin{array}{l} 4_{.9} = 36 + 36 \end{array} \right] & 44\% \text{ profit} \end{array}$$

to make SP of both goat same

$$70 \text{ units} \rightarrow 1008$$

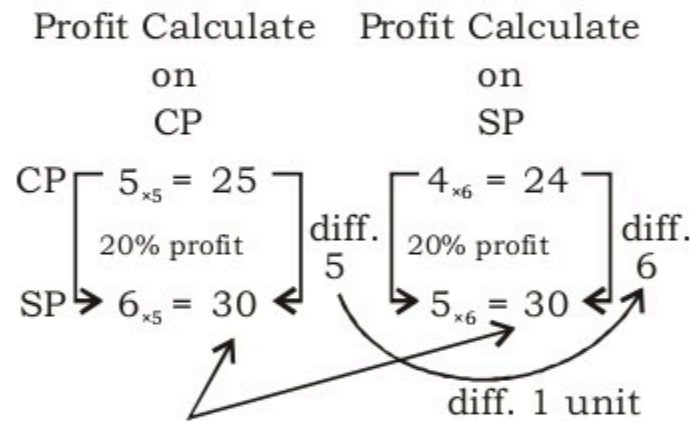
$$1 \text{ unit} \rightarrow \frac{1008}{70}$$

$$45 \text{ units} \rightarrow \frac{1008}{70} \times 45$$

$$72 \times 9 = \text{Rs. } 648$$

$$\text{CP of goat sold at loss} = \text{Rs. } 648$$

157. (c) According to question,

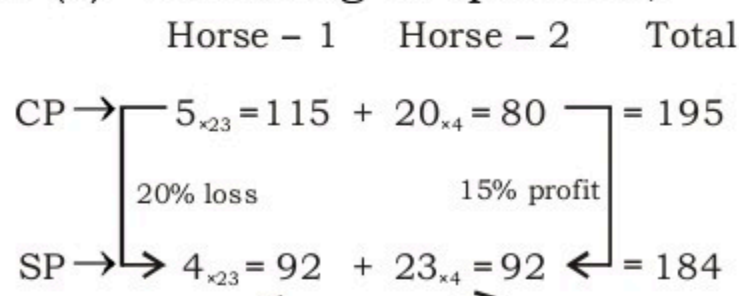


to make SP same of both chair

$$1 \text{ unit} \rightarrow \text{Rs. } 85$$

$$30 \text{ units} \rightarrow 30 \times 85 = \text{Rs. } 2550$$

158. (b) According to question,



to make SP same

Given,

$$195 \text{ units} \rightarrow 19500$$

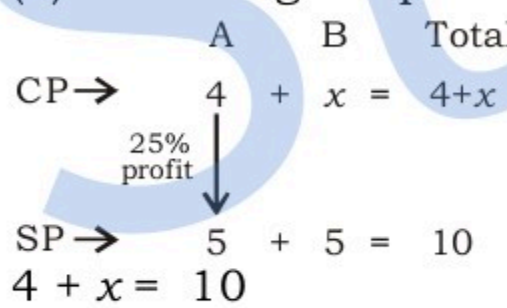
$$1 \text{ unit} \rightarrow \frac{19500}{195} = 100$$

$$115 \text{ units} \rightarrow 100 \times 115 = 11500$$

$$80 \text{ units} \rightarrow 80 \times 100 = 8000$$

$$\text{CP of two Horses are} \\ = \text{Rs. } 11500, \text{ Rs. } 8000$$

159. (c) According to question,



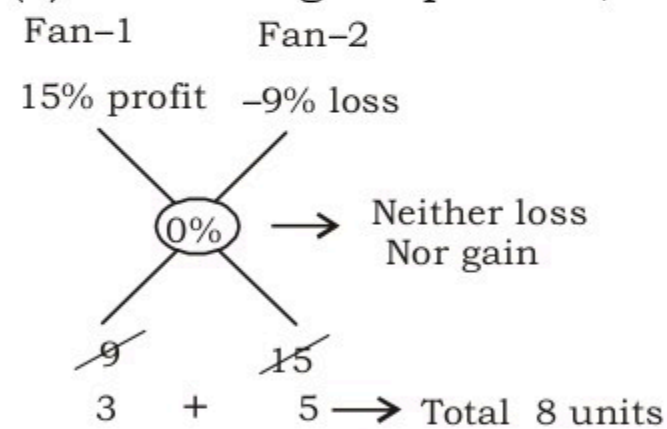
Because there is no profit no loss

$$x = 6$$

$$\text{Then loss is } 6 - 5 = 1$$

$$\therefore \text{Loss\%} = \frac{1}{6} \times 100 = 16\frac{2}{3}\%$$

160. (c) According to question,



$$8 \text{ units} = 2160$$

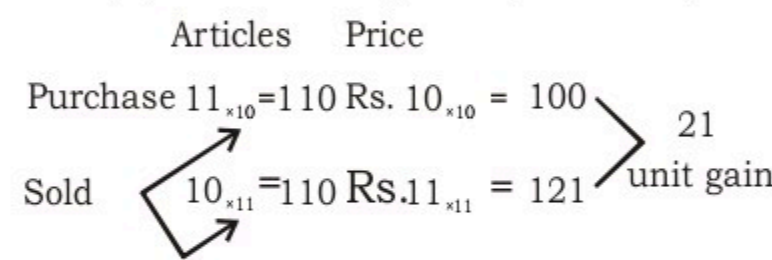
$$1 \text{ unit} = \frac{2160}{8} = 270$$

$$\therefore 3 \text{ units} = 3 \times 270 = \text{Rs. } 810$$

$$5 \text{ units} = 5 \times 270 = \text{Rs. } 1350$$

$$\text{CP} = \text{Rs. } 810, \text{ Rs. } 1350$$

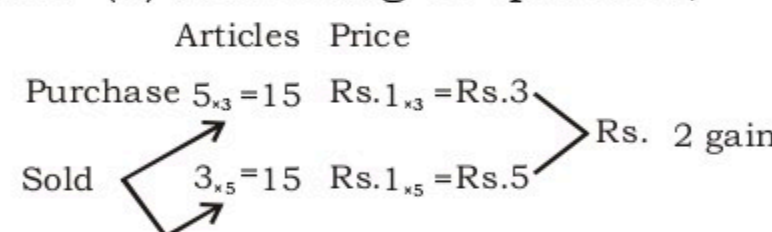
161. (c) According to question,



\therefore To make no. of articles same

$$\therefore 21\% \text{ gain}$$

162. (a) According to question,



\therefore To make no. of pencil same

$$\text{gain\%} = \frac{2}{3} \times 100 = 66\frac{2}{3}\% \text{ Ans.}$$

163. (d) According to question,

$$\text{CP of 100 oranges is} = \text{Rs. } 350$$

$$\text{CP of 1 oranges is}$$

$$= \text{Rs. } \frac{350}{100} = \text{Rs. } 3.5$$

$$\text{CP of 12 oranges is}$$

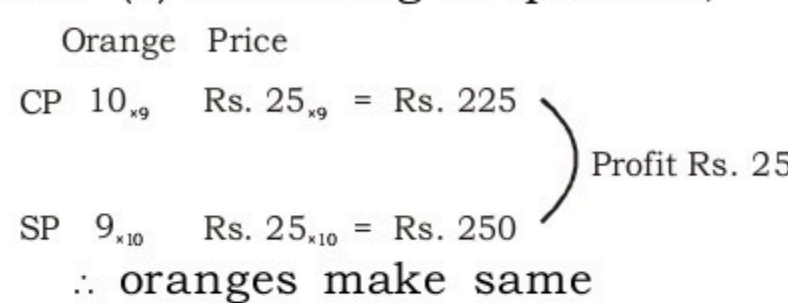
$$= \text{Rs. } 3.5 \times 12 = \text{Rs. } 42$$

$$\text{SP of 12 oranges is} = \text{Rs. } 48$$

$$\text{Profit} = \text{SP} - \text{CP} = \text{Rs. } (48 - 42) \\ = \text{Rs. } 6$$

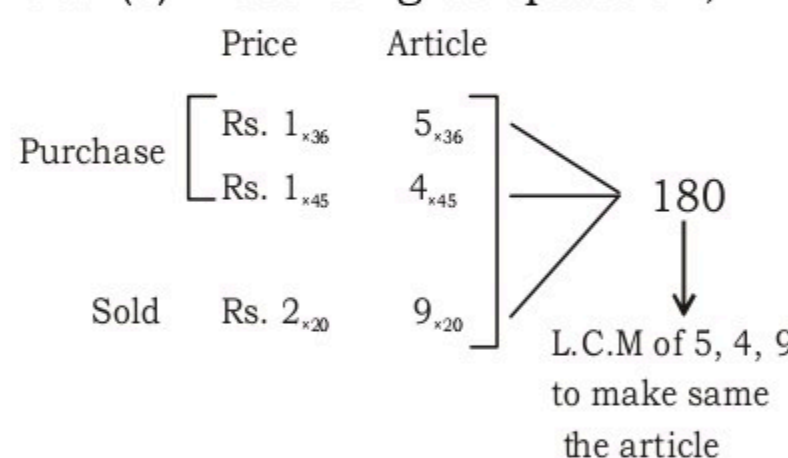
$$\text{Profit\%} = \frac{6}{42} \times 100 = \frac{100}{7} = 14\frac{2}{7}\%$$

164. (c) According to question,



$$\text{Profit\%} = \frac{25}{225} \times 100 = 11\frac{1}{9}\%$$

165. (b) According to question,



$$\text{CP} = 36 + 45 = 81 \text{ (360 A)}$$

$$\text{SP} = 40 \times 2 = 80 \text{ (360 A)}$$

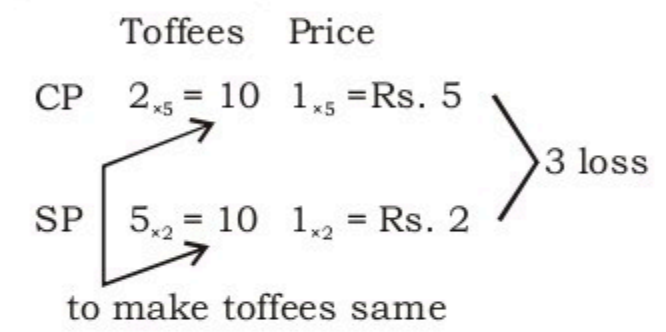
$$\text{Loss} = 81 - 80 = 1 \text{ unit}$$

$$1 \text{ unit} = 3 \text{ articles}$$

$$\therefore \text{Total no of articles}$$

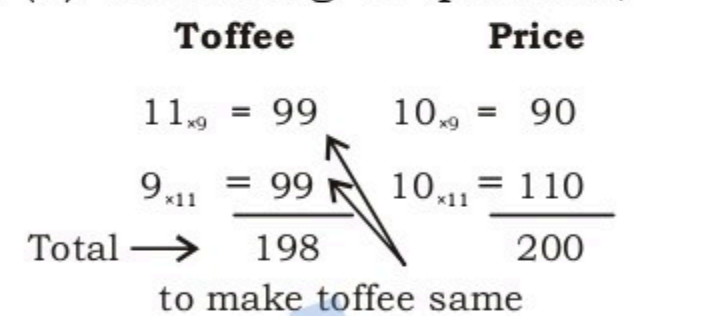
$$= 360 \times 3 = 1080$$

166. (d) According to question,



$$\text{loss\%} = \frac{3}{5} \times 100 = 60\%$$

167. (a) According to question,



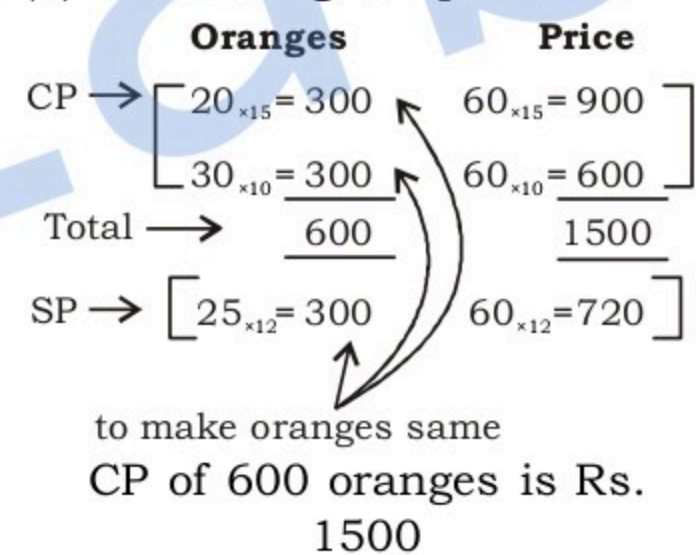
Sold at one rupee per toffee

$$\therefore \text{SP of 198 toffee} = \text{Rs. } 198$$

$$\text{CP of 198 toffee} = \text{Rs. } 200$$

$$\text{loss\%} = \frac{2}{200} \times 100 = 1\%$$

168. (b) According to question,



$$\text{SP of 300 oranges is Rs. } 720$$

$$\text{SP of 600 oranges is Rs. } 1440$$

$$\text{Loss} = \text{CP} - \text{SP}$$

$$= 1500 - 1440 = 60$$

$$\text{Loss\%} = \frac{60}{1500} \times 100 = 4\%$$

169. (c) According to question,

$$\text{CP of 73 articles are}$$

$$= \text{Rs. } 5110$$

$$\text{CP of 1 article is}$$

$$= \frac{5110}{73} = \text{Rs. } 70$$

$$\text{SP of 89 articles are} = \text{Rs. } 5607$$

$$\text{SP of 1 article is} = \text{Rs. } \frac{5607}{89} = \text{Rs. } 63$$

$$\text{loss} = \text{CP} - \text{SP} = 70 - 63 = \text{Rs. } 7$$

$$\text{loss\%} = \frac{7}{70} \times 100 = 10\%$$

170. (c) According to question,

Eggs	Price
CP → $3 \times 5 = 15$	$5 \times 5 = 25$
SP → $5 \times 3 = 15$	$12 \times 3 = 36$

11 units profit

to make article same
11 units → 143

$$1 \text{ unit} \rightarrow \frac{143}{11} = 13$$

∴ 15 units → $13 \times 15 = 195$
the numbers of eggs he bought is = 195.

171. (a) According to question,

Oranges	Price
CP → $8 \times 12 = 96$	$34 \times 12 = 408$
SP → $12 \times 8 = 96$	$57 \times 8 = 456$

48 units profit

to make oranges same
48 units → 45

$$1 \text{ unit} \rightarrow \frac{45}{48} = \frac{15}{16}$$

$$96 \text{ units} \rightarrow \frac{15}{16} \times 96 = 90$$

172. (c) According to question,

CP of 7 Pens are = Rs. 10
Gain 40%

SP of 7 Pens are = Rs. 14

$$\text{SP of 1 Pens is} = \frac{14}{7} = 2$$

Customer gets in 10 Rs.

$$= \frac{10}{2} = 5 \text{ pens}$$

173. (d) According to question,

Articles	Price
CP → $\begin{bmatrix} 1 \\ + \\ 1 \end{bmatrix}$	$\begin{bmatrix} 10 \\ \\ 14 \end{bmatrix}$
SP → $\begin{bmatrix} 1 \\ \\ 1 \end{bmatrix}$	$\begin{bmatrix} 24 \\ \\ 13 \end{bmatrix}$

2 profit

$$\text{Profit\%} = \frac{2}{24} \times 100 = 8\frac{1}{3}\%$$

174. (d)

Oranges	Price
Type 1 $3 \times 5 = 15$	$40 \times 5 = 200$
Type 2 $5 \times 3 = 15$	$60 \times 3 = 180$

(To make oranges same) 380 (Total Cp)

$$\text{SP} \rightarrow 3 \times 10 = 30 \quad 50 \times 10 = 500$$

$$\text{Gain percent} = \frac{\text{Profit}}{\text{C.P}} \times 100$$

$$\Rightarrow \frac{500 - 380}{380} \times 100$$

$$\Rightarrow \frac{120}{380} \times 100 = \frac{600}{19} = 31.57 = 32\%$$

175. (d) According to question,

	Old	New
Price	5	6
Consumption	6	5
Expenditure	30	30

$$\% \text{ decrease} = \frac{1}{6} \times 100 = 16\frac{2}{3}\%$$

176. (c) According to question,

$$\text{CP} = 30 \times 9.50 + 30 \times 8.5$$

$$= 30 [9.5 + 8.5]$$

$$= 30 \times 18 = \text{Rs. } 540$$

$$\text{SP} = 60 \times 8.90$$

$$= \text{Rs. } 534$$

$$\text{Loss} = \text{CP} - \text{SP} = 540 - 534$$

$$= \text{Rs. } 6$$

177. (c) According to question,

Tea - 1	Tea - 2	Total CP
180 per kg	200 per kg	
$\times 5$	$\times 3$	
CP = 900	600	1500

$$\text{SP} = 210 \times (5 + 3)$$

$$= 210 \times 8 = 1680$$

$$\text{Profit} = \text{SP} - \text{CP}$$

$$= 1680 - 1500 = 180$$

$$\text{Profit} = \frac{\text{Profit}}{\text{CP}} \times 100$$

$$= \frac{180}{1500} \times 100 = 12\%$$

178. (a) According to question,

CP of Mixture

$$= \frac{80 \times 13.5 + 120 \times 16}{200} = \frac{1080 + 1920}{200}$$

$$= \frac{3000}{200} = 15 \text{ to gain 20\% SP is}$$

$$= 15 + \frac{20}{100} \times 15$$

$$= 15 + 3 = \text{Rs. } 18 \text{ Per kg}$$

Alternate

13.50/kg	16/kg
$16 - x$	$x - 13.5$
80 kg	120 kg
2	3
$\frac{16 - x}{x - 13.5} = \frac{2}{3}$	
$48 - 3x = 2x - 27$	
$5x = 75$	
$x = 15/\text{kg}$	

CP of mixture = Rs. 15 kg

$$\text{to gain 20\% SP} = 15 + \frac{20}{100} \times 15$$

$$= 15 + 3 = 18/\text{kg.}$$

179. (b) Let cost price of 1 kg = Rs 1

cost price of 50 kg = Rs 50

$$\Rightarrow \text{Profit} = \frac{10}{100} \times 50 = \text{Rs } 5$$

$$\therefore \text{Qty to added} = \frac{5}{1} = 5 \text{ kg}$$

180. (d) According to question,

CP of 70 litres of milk = ₹ 630

Added 5 litres of water

Now, solution becomes

= 75 litres

CP of water = Rs. 0

∴ SP of 1 litre milk = Rs. 9

SP of 75 litre milk = 9×75

$$= 675 \text{ Rs.}$$

$$\text{Profit} = \text{SP} - \text{CP}$$

$$= 675 - 630 = 45$$

$$\text{Profit\%} = \frac{45}{630} \times 100 = \frac{50}{7} = 7\frac{1}{7}\%$$

181. (a) According to question,

SP of mixture of milk and water = Rs. 9

Profit = 20%

∴ CP of mixture of milk and

$$\text{water} = 9 \times \frac{100}{120} = \text{Rs. } 7.5$$

Now we use allegation to find the ratio in which water and milk mixed

Price of Pure milk	Price of Pure Water
10	0
7.5	7.5
3	1

Price of mixture

Ans

182. (d) According to question,

CP of Mixture of Rice

$$= 15 \times 29 + 25 \times 20$$

$$= 435 + 500 = \text{Rs. } 935$$

SP of 1 kg Mixture of Rice = Rs. 27

SP of 40 kg Mixture of Rice

$$= 27 \times 40 = \text{Rs. } 1080$$

Profit = SP - CP

$$= 1080 - 935 = \text{Rs. } 145$$

183. (c) Let first blend is 2 kg and second blend is 3 kg.

$$\text{Total cost price} = (35 \times 2) + (40 \times 3) \\ = 70 + 120 = 190 \text{ Rs.}$$

$$\text{Total SP} = (1 \times 46) + (4 \times 55)$$

$$\left[\frac{1}{5} \text{ of } 5 \text{ kg} = 1 \text{ kg} \right] = \text{Rs. } 266$$

$$\text{Profit percent} = \frac{\text{Total profit}}{\text{Total C.P.}} \times 100$$

$$\Rightarrow \frac{(266 - 190)}{190} \times 100$$

$$\Rightarrow \frac{76}{190} \times 100 = 40\%$$

184. (d) Ratio will be $25\% = \frac{1}{4}$

$$\text{water : milk} = 1 : 4$$

185. (c) According to question,

$$\text{Let CP of 1 ball} = \text{Rs. } x$$

$$\therefore \text{CP} - \text{SP} = \text{loss}$$

$$17x - 720 = 5x$$

$$12x = 720, \quad x = 60$$

$$\therefore \text{CP of 1 ball is Rs. } 60$$

186. (a) Let SP of 1 book is Rs. x

$$\text{SP of 25 books is Rs. } 25x$$

$$\text{According to question,}$$

$$\text{SP} - \text{CP} = \text{Profit}$$

$$25x - 2000 = 5x$$

$$25x - 5x = 2000$$

$$20x = 2000$$

$$x = \text{Rs. } 100$$

$$\therefore \text{SP of 1 book is Rs. } 100$$

187. (a) Let SP of 1 hen = Rs. 1

$$\text{SP of 144 hens} = \text{Rs. } 144$$

$$\text{Let CP of 1 hen} = \text{Rs. } x$$

$$\text{CP of 144 hens} = \text{Rs. } 144x$$

$$\text{According to question,}$$

$$\text{CP} - \text{SP} = \text{loss (SP of 96 hens)}$$

$$144x - 144 = 96$$

$$144x = 96 + 144$$

$$144x = 240$$

$$x = \frac{240}{144} = \frac{5}{3}$$

$$\text{CP of 1 hen} = \text{Rs. } \frac{5}{3}$$

$$\text{CP of 144 hens} = \frac{5}{3} \times 144$$

$$= \text{Rs. } 240$$

$$\text{Loss\%} = \frac{96}{240} \times 100 = 40\%$$

188. (a) Let SP of 1 pencil is Rs. 1
SP of 100 pencils is Rs. 100
CP of 1 pencil is Rs. x
CP of 100 pencils is Rs. $100x$

$$\text{According to question,}$$

$$\text{Gain} = \text{SP} - \text{CP}$$

$$20 = 100 - 100x$$

$$100x = 80$$

$$x = \frac{80}{100} = \frac{4}{5}, \quad x = \frac{4}{5}$$

$$\text{CP of 1 pencil} = \text{Rs. } \frac{4}{5}$$

$$\text{CP of 100 pencils} = \frac{4}{5} \times 100 = \text{Rs. } 80$$

$$\text{SP of 100 pencils} = \text{Rs. } 100$$

$$\therefore \text{gain\%} = \frac{20}{80} \times 100 = 25\%$$

189. (a) Let SP of 1 metre cloth = Rs. 1

$$\text{SP of 33 metres cloth} = \text{Rs. } 33$$

$$\text{CP of 1 metre cloth} = \text{Rs. } x$$

$$\text{CP of 33 metre cloth} = \text{Rs. } 33x$$

$$\text{According to question,}$$

$$\text{Profit} = \text{SP} - \text{CP}$$

$$11x = 33 - 33x$$

$$44x = 33$$

$$x = \frac{33}{44} = \frac{3}{4}$$

$$\text{CP of 1 metre} = \text{Rs. } \frac{3}{4}$$

$$\text{CP of 33 metres} = \frac{3}{4} \times 33$$

$$= \text{Rs. } \frac{99}{4}$$

$$\text{SP of 33 metres} = \text{Rs. } 33$$

$$\text{Profit} = \text{SP} - \text{CP} = 33 - \frac{99}{4} = \frac{33}{4}$$

$$\therefore \text{Profit\%} = \frac{\frac{33}{4}}{\frac{99}{4}} \times 100 = \frac{33}{99} \times 100$$

$$= \frac{1}{3} \times 100 = 33\frac{1}{3}\%$$

Alternate

$$\text{Let SP of 1 metre cloth} = \text{Rs. } 1$$

$$\text{SP of 33 metre cloth} = 33$$

$$33 \text{ SP} - 33 \text{ CP} = 11 \text{ CP}$$

$$33 \text{ SP} = 44 \text{ CP}$$

$$\frac{\text{SP}}{\text{CP}} = \frac{4}{3} > 1$$

$$\text{Profit} = 1$$

$$\text{Profit \%} = \frac{1}{3} \times 100 = 33\frac{1}{3}\%$$

190. (c) Let the SP of 1 metre cloth = Rs. 1

$$\text{The SP of 33 metres cloth}$$

$$= 1 \times 33 = \text{Rs. } 33$$

$$\text{CP of 1 metre cloth} = \text{Rs. } x$$

$$\text{CP of 33 metres cloth} = x \times 33 \\ = \text{Rs. } 33x$$

$$\text{According to question,}$$

$$\text{Profit} = \text{SP} - \text{CP}$$

$$11 = 33 - 33x$$

$$33x = 22$$

$$x = \frac{22}{33} = \frac{2}{3}$$

$$\text{CP of 1 metre cloth} = \text{Rs. } \frac{2}{3}$$

$$\text{CP of 33 metre cloth} = \frac{2}{3} \times 33$$

$$= \text{Rs. } 22$$

$$\text{SP of 33 metres cloth} = \text{Rs. } 33$$

$$\text{Profit} = \text{SP} - \text{CP}$$

$$= 33 - 22 = 11$$

$$\text{Profit\%} = \frac{11}{22} \times 100 = 50\%$$

191. (a) According to question,

$$\text{CP} = \text{Rs. } 840$$

$$10\% \text{ Profit on CP} = \frac{10}{100} \times 840 = \text{Rs. } 84$$

$$\therefore \text{SP} = 840 + 84 = \text{Rs. } 924$$

$$\text{New buyer CP} = \text{Rs. } 924$$

$$5\% \text{ loss on CP} = \frac{5}{100} \times 924 \\ = \text{Rs. } 46.2$$

$$\text{SP} = \text{Rs. } 924 - 46.2 = \text{Rs. } 877.80$$

192. (c) According to question,

$$\text{SP} = \frac{2}{3} \text{ MP}, \quad \frac{\text{SP}}{\text{MP}} = \frac{2}{3}$$

$$\text{If there is loss of } 10\% \text{ means } \frac{1}{10}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{10}{9} > \text{loss of } 10\%$$

$$\frac{\text{CP}}{\text{SP}} = \frac{10}{9}, \quad \frac{\text{SP}}{\text{MP}} = \frac{2}{3}$$

to make a ratio

$$\text{CP} \quad \text{SP} \quad \text{MP}$$

$$20 \quad 18 \quad 27$$

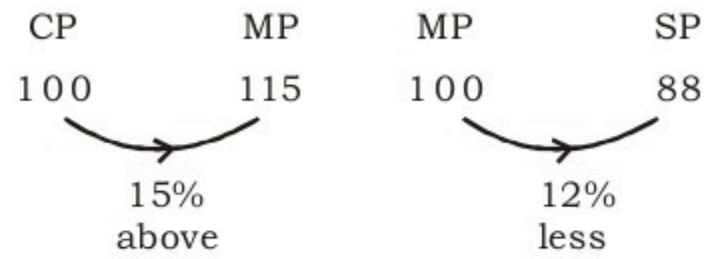
% profit when article is sold at MP

$$\text{Profit} = \text{MP} - \text{CP}$$

$$= 27 - 20 = \text{Rs. } 7$$

$$\text{Profit\%} = \frac{7}{20} \times 100 = 35\%$$

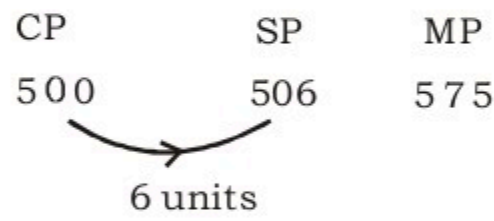
193. (b) According to question,



$$\frac{CP}{MP} = \frac{100}{115} = \frac{20}{23}$$

$$\frac{MP}{SP} = \frac{100}{88} = \frac{25}{22}$$

The ratio becomes,



$$\text{Profit \%} = \frac{6}{500} \times 100 = 1\frac{1}{5}\%$$

194. (c) In this type of question go through option

Option: (c)

CP = Rs. 50

Gains as much percentage as the cost price of the article means 50% gains

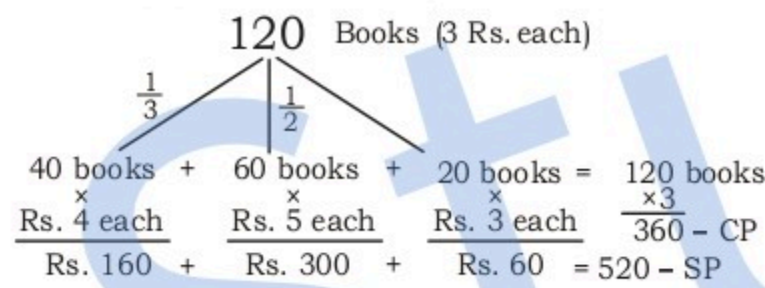
50% of CP

50% of Rs. 50 = Rs. 25

SP = CP + Profit = 50 + 25

SP = Rs. 75

195. (b) According to question



Total, CP = 360

SP = 520

Profit = 520 - 360 = 160

$$\text{Profit \%} = \frac{160}{360} \times 100$$

$$= \frac{400}{9} = 44\frac{4}{9}\%$$

196. (b) According to question
Sells it 10% profit of the SP

$$\frac{1 \rightarrow \text{Profit}}{10 \rightarrow \text{SP}}$$

CP = SP - Profit $\Rightarrow 10 - 1 = 9$ units

Now, 9 units \rightarrow Rs. 27

1 unit \rightarrow Rs. 3

10 units $\rightarrow 3 \times 10 =$ Rs. 30

SP of article = Rs. 30

197. (b) According to question,

SP = Rs. 144

CP is equal to percentage of profit.
Note: In this type of question go through option.

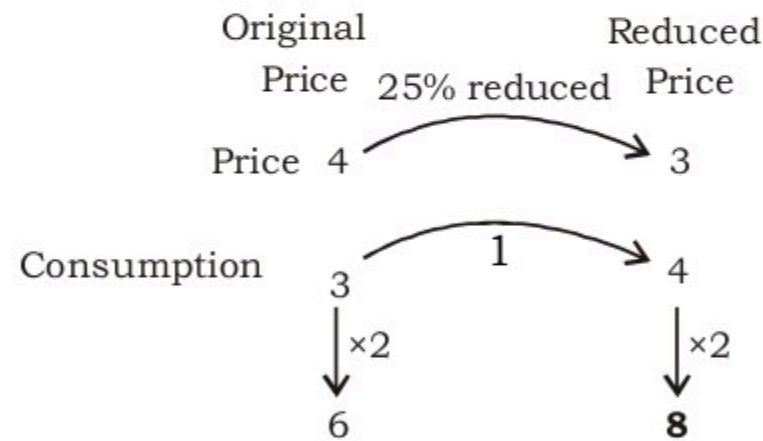
Option (b): CP = Rs. 80

Profit% = 80%

$$SP = 80 + \frac{80}{100} \times 80$$

= Rs. 144 (Satisfied)

198. (a) According to question,



1 unit $\rightarrow 2$

3 units $\rightarrow 2 \times 3 = 6$ eraser

4 units $\rightarrow 2 \times 4 = 8$ eraser

199. (d) According to question,

$$CP = \frac{13}{15} SP, \quad \frac{CP}{SP} = \frac{13}{15}$$

If they sold 12% more then its Old selling price. So New selling price is

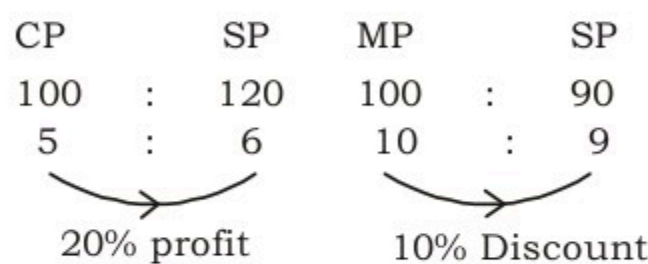
$$= 15 + \frac{12}{100} \times 15 = 16.8$$

$$\therefore \text{Profit} = SP - CP$$

$$= 16.8 - 13 = 3.8$$

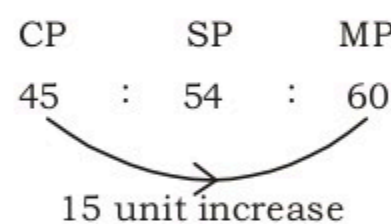
$$\text{Profit\%} = \frac{3.8}{13} \times 100 = 29\frac{3}{13}\%$$

200. (c) According to question,



$$\text{If } \frac{CP}{SP} = \frac{5}{6} = \frac{MP}{SP} = \frac{10}{9}$$

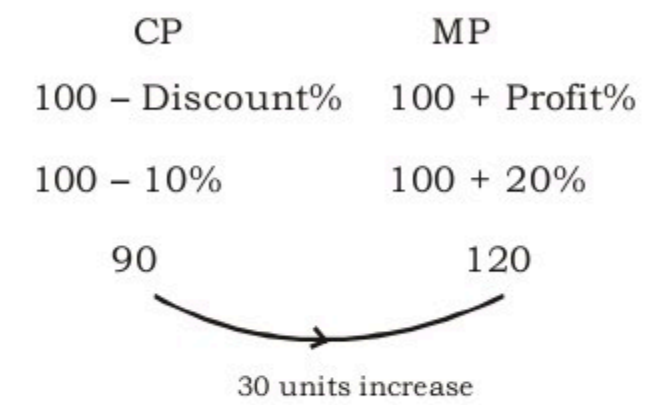
to make same SP



\therefore Percentage raised

$$= \frac{15}{45} \times 100 = 33\frac{1}{3}\%$$

Quicker approach:



$$\% \text{ raised} = \frac{30}{90} \times 100 = 33\frac{1}{3}\%$$

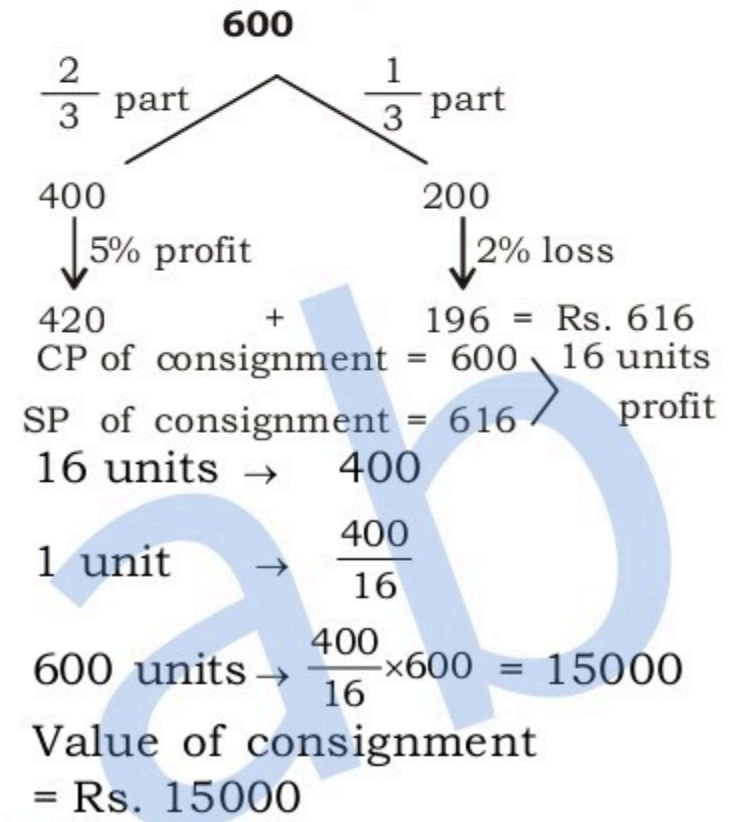
201. (a) Let total consignment is 600 units

And the value of 1 unit is = Rs. 1

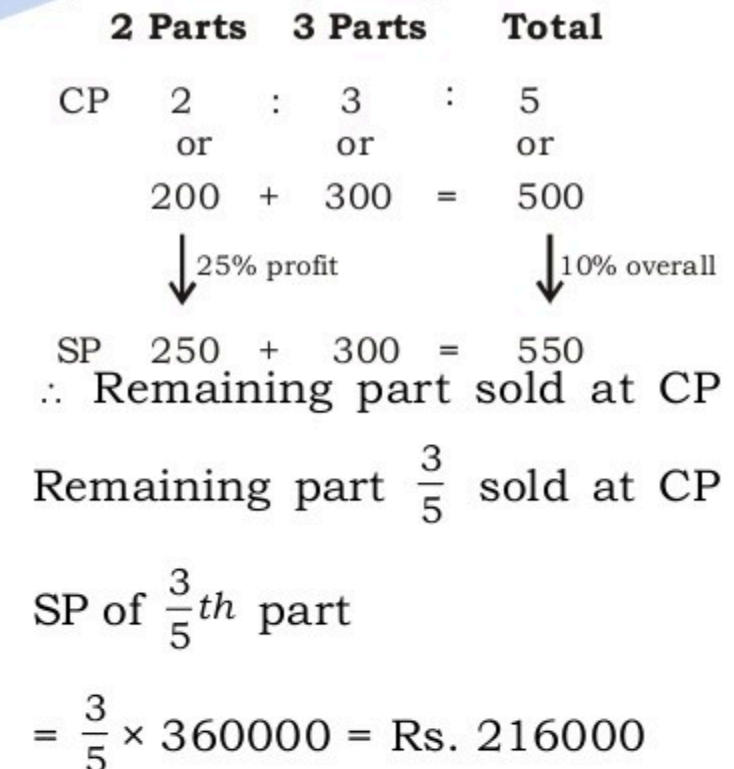
The value of 600 units

= 1 \times 600 = Rs. 600

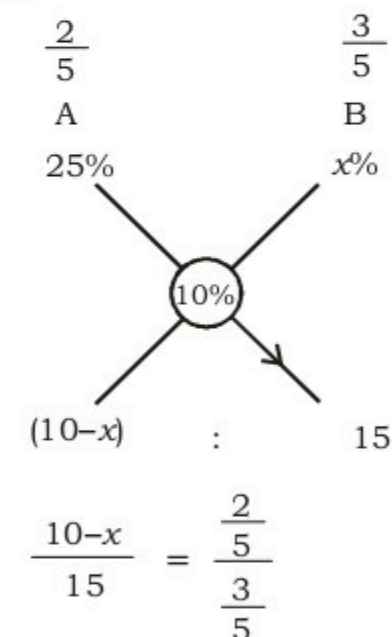
According to question,



202. (c) According to question,



Alternate



$$\frac{10-x}{15} = \frac{2}{3}, \quad x = 0\%$$

Hence, remaining $\frac{3}{5}$ th part sold at CP.1

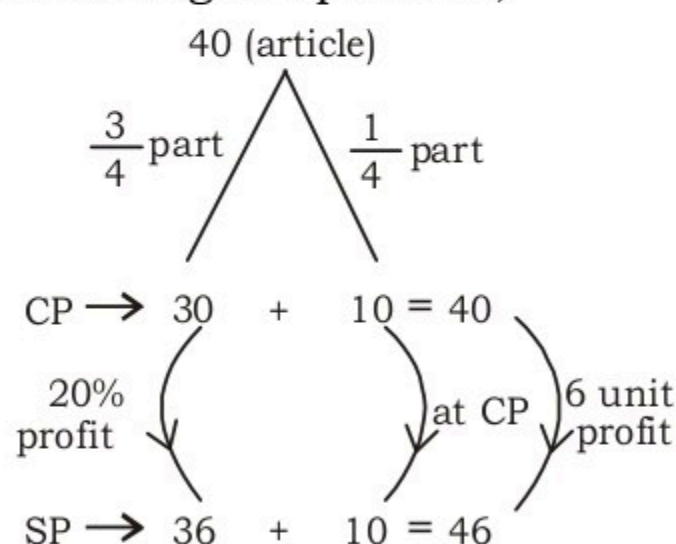
$$\therefore \text{SP of part } \frac{3}{5}\text{th} = \frac{3}{5} \times 360000$$

= Rs. 216000

203. (c) Let total no. of articles is 40 unit

CP of 1 article is Rs. 1

According to question,



$$\text{Profit\%} = \frac{6}{40} \times 100 = 15\%$$

204. (c) According to question,

CP of 12 articles = Rs. P

$$\text{SP of 1 article} = \text{Rs. } \frac{P}{8}$$

$$\text{SP of 12 article} = \frac{P}{8} \times 12 = \frac{3}{2}P$$

$$\text{Profit} = \text{SP} - \text{CP}$$

$$\frac{3P}{2} - P = \frac{3P - 2P}{2} = \frac{P}{2}$$

$$\text{Profit \%} = \frac{\frac{P}{2}}{\frac{P}{8}} \times 100 = \frac{1}{2} \times 100 = 50\%$$

205. (d) According to question,

$$25\% \text{ of SP} = \frac{1 \rightarrow \text{Profit}}{4 \rightarrow \text{SP}}$$

$$\therefore \text{CP} = \text{SP} - \text{Profit}$$

$$\text{CP} = 4 - 1$$

$$\text{CP} = 3$$

$$\text{Profit\%} = \frac{\text{Profit}}{\text{CP}} \times 100$$

$$= \frac{1}{3} \times 100 = 33\frac{1}{3}\%$$

206. (b) According to question,

$$20\% \text{ profit on CP} = \frac{1 \rightarrow \text{Profit}}{5 \rightarrow \text{CP}}$$

$$\therefore \text{SP} = \text{CP} + \text{Profit}$$

$$\text{SP} = 5 + 1$$

$$\text{SP} = 6$$

Percentage of profit calculated on SP

$$\text{Profit\%} = \frac{\text{Profit}}{\text{SP}} \times 100$$

$$= \frac{1}{6} \times 100 = 16\frac{2}{3}\%$$

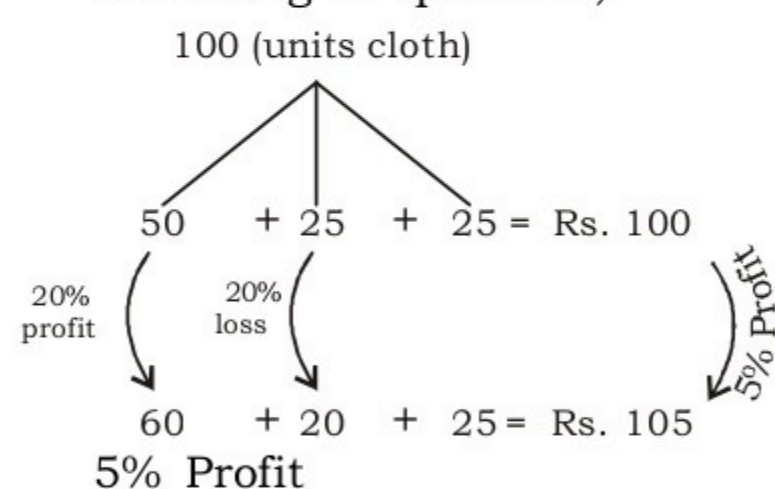
207. (a) Let the total cloth is

= 100 units

CP of 100 units cloth are

= Rs. 100

According to question,



208. (d) According to question,

20 dozen eggs CP = Rs. 720

1 dozen eggs CP = Rs. 36

1 egg CP = Rs. 3

to gain 20% SP of 1 egg is

$$= \text{CP} + \text{profit\%} \times \text{CP}$$

$$= 3 + \frac{20}{100} \times 3$$

$$= 3 + 0.6 = \text{Rs. } 3.6$$

209. (c) Let CP of 12 Lemons

= Rs. 5 units

According to question,

SP of 5 lemons = Rs. 14

$$\text{SP of 1 lemon} = \frac{14}{5}$$

$$\text{SP of 12 lemons} = \frac{14}{5} \times 12$$

$$= \text{Rs. } \frac{168}{5}$$

$$5 \text{ units (CP)} \xrightarrow{40\% \text{ profit}} 7 \text{ units (SP)}$$

$$7 \text{ units} \rightarrow \frac{168}{5}$$

$$1 \text{ unit} \rightarrow \frac{168}{5 \times 7} = \frac{24}{5}$$

$$5 \text{ units} \rightarrow \frac{24}{5} \times 5 = 24$$

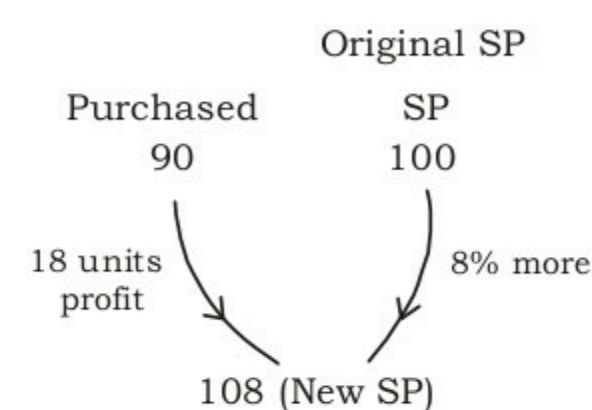
CP of 12 lemons = Rs. 24

210. (a) According to question,

Mahesh purchased radio

= $\frac{9}{10}$ of its SP

Let original SP = 100 units



$$\text{Profit\%} = \frac{18}{90} \times 100 = 20\%$$

211. (a) Richa purchased an article

= $\frac{4}{5}$ of its list price

Let list price = 50 units

\therefore Richa purchased at

= 40 units

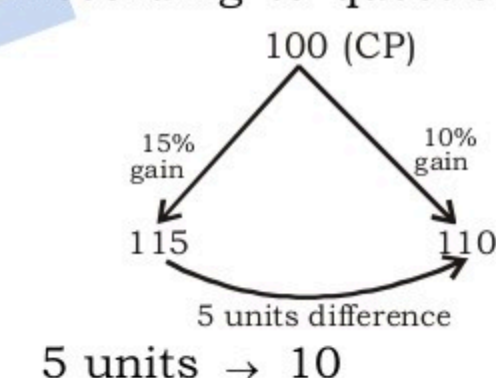


$$\text{Profit\%} = \frac{20}{40} \times 100 = 50\%$$

212. (d) Let CP of the article is

= 100 units

According to question,



$$5 \text{ units} \rightarrow 10$$

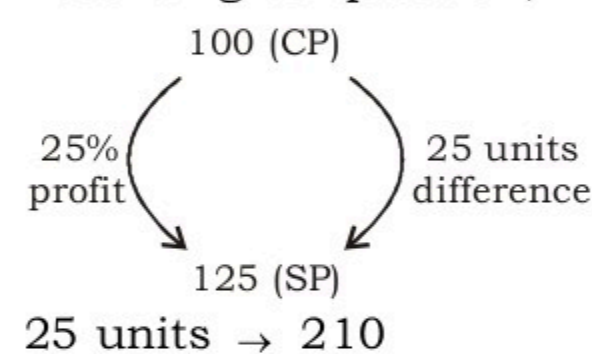
$$1 \text{ unit} \rightarrow \frac{10}{5}$$

$$100 \text{ units} \rightarrow \frac{10}{5} \times 100$$

$$= \text{Rs. } 200$$

213. (b) Let the CP of the article = 100 units

According to question,



$$25 \text{ units} \rightarrow 210$$

$$1 \text{ unit} \rightarrow \frac{210}{25}$$

$$125 \text{ units} \rightarrow \frac{210}{25} \times 125$$

$$= \text{Rs. } 1050 \text{ (SP)}$$

214. (d) Let initial SP = 100
Reduced SP = 100 - 60 = 40
According to question,

$$\begin{array}{ccc} \text{CP} & & \text{SP} \\ 100 & \xrightarrow{10\% \text{ loss}} & 90 \\ 90 \text{ units} & = & 40 \end{array}$$

$$1 \text{ unit} = \frac{40}{90}$$

$$100 \text{ units} = \frac{40}{90} \times 100 = \frac{400}{9}$$

$$\text{CP} = \frac{400}{9}, \text{ SP} = 100$$

$$\text{Profit} = 100 - \frac{400}{9} = \frac{500}{9}$$

$$\text{Profit}\% = \frac{\frac{500}{9}}{\frac{400}{9}} \times 100 = \frac{5}{4} \times 100 = 125\%$$

215. (d) According to question,

$$\text{CP} = \frac{95}{100} \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{95}{100} = \frac{19}{20} > 1 \text{ unit profit}$$

$$\text{Profit}\% = \frac{1}{19} \times 100 = 5.26\%$$

216. (d) According to question,

$$\text{CP} = \frac{90}{100} \text{ SP}$$

$$\frac{\text{CP}}{\text{SP}} = \frac{9}{10} > 1 \text{ unit profit}$$

$$\text{Profit}\% = \frac{1}{9} \times 100 = 11\frac{1}{9}\%$$

217. (d) Let the price of cloth = Rs. 100
and consumption of cloth = 10 units
According to question,

Price	Consumption	Revenue
100	10	1000
75	12	900

25% Reduce 20% increase 100 units loss

$$\text{Loss}\% = \frac{100}{1000} \times 100 = 10\%$$

= 10% decreases

218. (c) Let CP of the article = 100

According to question,

$$100(\text{CP}) \xrightarrow{30\% \text{ profit}} 130(\text{SP})$$

Given:

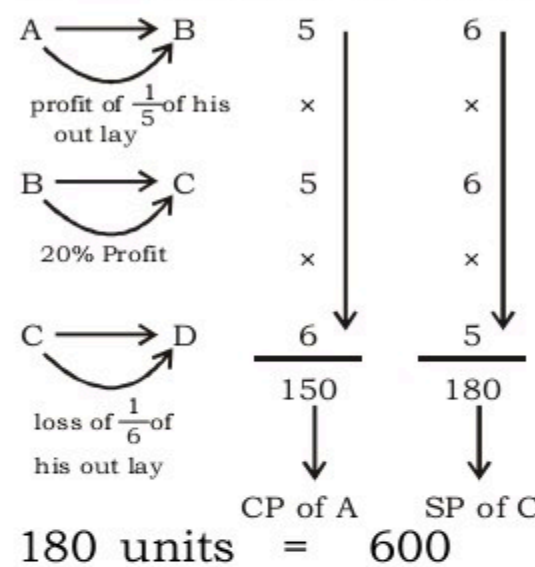
$$130 \text{ units} = 1690$$

$$1 \text{ unit} = \frac{1690}{130} = 13$$

$$100 \text{ units} = 13 \times 100 = 1300$$

$$\text{CP} = \text{Rs. } 1300$$

219. (b) According to question,



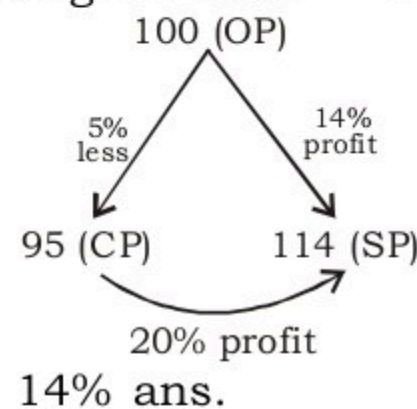
$$180 \text{ units} = 600$$

$$1 \text{ unit} = \frac{600}{180}$$

$$150 \text{ units} = \frac{600}{180} \times 150 = 500$$

$$\text{CP of A} = \text{Rs. } 500$$

220. (c) According to question,
Let original Price = 100



221. (c) Profit of A = Profit of B (given)

$$10\% \text{ A} = 15\% \text{ B}$$

$$\frac{\text{A}}{\text{B}} = \frac{15}{10} = \frac{3}{2}$$

$$\text{A} : \text{B} = 3 : 2$$

Now with the help of option,
check the ratio of CP of A and B
Option (C)

$$\frac{3000}{3} : \frac{2000}{2}$$

222. (a) Let the Marked price = 100
According to the question,

$$\text{Selling price} = \frac{\text{M.P.}}{2} = \frac{100}{2} = 50$$

$$\text{Loss} = 20\%$$

$$\text{Cost price} = 50 \times \frac{100}{80} = \frac{125}{2}$$

$$\text{Profit} = \text{M.P.} - \text{CP} = 100 - \frac{125}{2}$$

$$\text{Profit} = \frac{75}{2}$$

$$\text{Profit}\% = \frac{\frac{75}{2}}{\frac{125}{2}} \times 100 = 60\%$$

223. (a) According to the question.

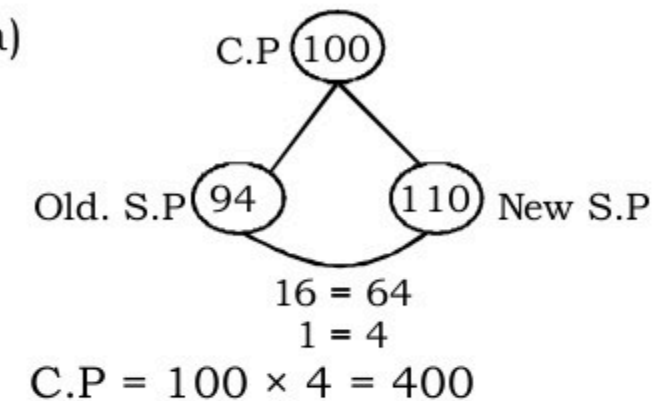
$$\text{C.P.} = \text{Rs. } 25$$

$$\text{S.P.} = \text{Rs. } 30$$

$$\text{Profit} = \text{S.P.} - \text{C.P.} = 30 - 25 = \text{Rs. } 5$$

$$\text{P}\% = \frac{5}{25} \times 100 = 20\%$$

224. (a)



225. (c) According to question,

$$20\% \text{ Profit} = \frac{1 \rightarrow \text{Profit}}{5 \rightarrow \text{SP}}$$

$$\therefore \text{CP} = \text{SP} - \text{Profit}$$

$$\text{CP} = 5 - 1 = 4$$

Actual Profit always count on CP

$$\text{i.e., Profit}\% = \frac{1}{4} \times 100 = 25\%$$

226. (d) According to question,
Cost of 7 oranges = Rs. 3

$$\text{Cost of 1 orange} = \text{Rs. } \frac{3}{7}$$

for 33% gain

$$\text{SP} = \frac{3}{7} \times \frac{133}{100}$$

for 100 oranges

$$\text{SP} = \frac{3}{7} \times \frac{133}{100} \times 100$$

$$\text{SP} = \text{Rs. } 57$$

227. (d) According to question,

$$\text{SP of 6 articles} = \text{Rs. } 1$$

$$\text{SP of 1 article} = \text{Rs. } \frac{1}{6}$$

Loss of 20% is incurred

$$= 100 - 20 = 80$$

When 6 articles are sold

$$\text{CP of 1 article} = \frac{1}{6} \times \frac{100}{80}$$

$$\text{to gain } 20\% = \frac{1}{6} \times \frac{100}{80} \times \frac{120}{100} = \frac{1}{4}$$

Articles should be sold Rs. 1 to gain 20% is = 4

228. (c) According to question,

$$\text{SP of 12 oranges} = \text{Rs. } 60$$

$$\text{Loss} = 25\%$$

$$\text{CP of 12 oranges} = 60 \times \frac{100}{75} = 80$$

to gain 25%

$$\text{SP} = 80 + \frac{25}{100} \times 80 = \text{Rs. } 100$$

12 oranges sell for Rs. 100 to gain 25% = 12 Oranges

229. (b) S.P. of 4 article = Rs 1
Loss = 4%

$$\text{C.P. of 4 article} = 1 \times \frac{100}{96} = \frac{100}{96}$$

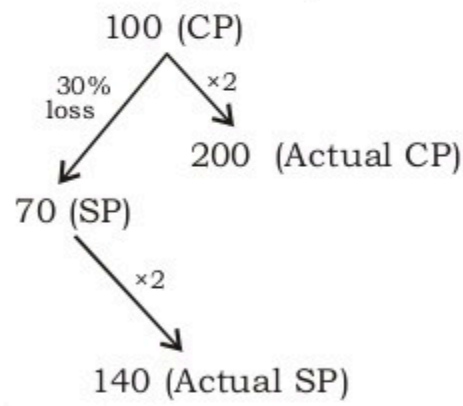
$$\text{C.P. of 3 article} = \frac{100}{96} \times \frac{3}{4} = \frac{75}{96}$$

$$\text{New S.P. of 3 article} = \text{Rs } 1$$

$$\text{Profit\%} = \frac{1 - \frac{75}{96}}{\frac{75}{96}} \times 100$$

$$= \frac{21}{75} \times 100 = 28\%$$

230. (a) According to question,



$$\text{CP of 80 ball pens} = \text{Rs. } 200$$

$$\text{CP of 1 ball pens} = \frac{200}{80} = \text{Rs. } 2.5$$

to gain 30% SP of 1 ball pens

$$= 2.5 + \frac{30}{100} \times 2.5 = 2.5 + 0.75$$

$$= \text{Rs. } 3.25$$

Ball pens he sale in

$$\text{Rs. } 104 = \frac{104}{3.25} = 32 \text{ Pens}$$

231. (c) Let SP of 1 oranges = Rs. 1
SP of 36 oranges = Rs. 36
SP of 4 orange = Rs. 4
CP of 36 oranges = Rs. 36 + 4 = 40
According to question,
Loss = CP - SP

$$4 = 40 - 36$$

$$\text{Loss\%} = \frac{4}{40} \times 100 = 10\%$$

232. (b) According to the question,
 \therefore CP of 4 bananas is
= Rs. 1

$$\therefore \text{CP of 1 banana} = \text{Rs. } \frac{1}{4}$$

$$\Rightarrow \text{For making } 33\frac{1}{3}\% \text{ profit SP}$$

$$\text{of banana will be} = \frac{1}{4} \times \frac{4}{3} = \text{Rs. } \frac{1}{3}$$

\Rightarrow Therefore 3 bananas should be sold in Rs. 1

233. (b) SP of 1 potatoes = Rs. $\frac{63}{12}$

$$= \text{Rs. } \frac{21}{4}$$

$$\text{CP} \times \frac{(100 + P\%)}{100} = \text{SP}$$

$$\text{CP} \times \frac{105}{100} = \frac{21}{4}$$

$$\text{CP} = \text{Rs. } 5$$

Gain or loss percent by selling 50 kg of the same potatoes for Rs. 247.50

$$\text{CP of 50 kg potatoes} = 50 \times 5 = \text{Rs. } 250$$

$$\text{Loss} = 250 - 247.50 = \text{Rs. } 2.50$$

$$\text{Loss\%} = \frac{2.50}{250} \times 100 = 1\%$$

234. (a) Let CP of a watch = Rs. x.

According to question,

$$\text{Profit} = \text{SP} - \text{CP}$$

$$4x = 14 \times 450 - 14x$$

$$18x = 14 \times 450$$

$$x = \frac{14 \times 450}{18} = 350$$

$$\text{CP of a watch} = \text{Rs. } 350$$

235. (b) $20\% = \frac{1}{5} \rightarrow \text{Profit}$
 $\rightarrow \text{CP}$

$$\text{SP} = 6 \text{ units} \rightarrow 390$$

$$5 \text{ units} \rightarrow \frac{390 \times 5}{6} = 325$$

236. (b) According to Question,
CP of 12 articles = Rs. 12
CP of 1 article = Rs. 1
SP of 1 article = Rs. 1.25
Profit = SP - CP
Profit = Rs. (1.25 - 1)
= Rs. 0.25

$$\text{Profit \%} = \frac{\text{Profit}}{\text{CP}} \times 100$$

$$\Rightarrow \frac{0.25}{1} \times 100 = 25\%$$

237. (a) Given,
CP of 10 kg. apples = 405
But 1 kg rotten
 \therefore Remaining = 9 kg apple
 \therefore CP of 1 kg apple

$$= \frac{405}{9} = 45$$

$$\text{To gain } 10\% \text{ of } 45 = 4.5$$

$$\text{SP} = 45 + 4.5 = \text{Rs. } 49.5$$

238. (a) According to question,
SP of 12 = Rs. 1800
SP = CP + Profit
12 CP + 3 CP = Rs. 1800 [as gain is 3 CP]
15 CP = 1800

$$\text{CP} = \frac{1800}{15} \Rightarrow \text{CP} = \text{Rs. } 120$$

239. (a) According to question,
CP of 200 book = 12000

$$\text{CP of 1 book} = \frac{12000}{200}$$

$$= \text{Rs. } 60$$

To get 20 books free

$$\text{Profit} = 20 \times 60 = 1200$$

i.e. 10% of Rs. 12000

$$\Rightarrow 10\% \text{ gain}$$

240. (c) According to question,
Reduction in S.T.

$$= \frac{7}{2} - \frac{10}{3} = \frac{21 - 20}{6}$$

$$= \frac{1}{6} \% = \frac{1}{600}$$

\therefore Reduction in marked price at 8400

$$= 8400 \times \frac{1}{600} = 14$$

241. (d) In such type of pattern based question adopt option approach,
Ist \rightarrow Check Largest value of CP
IInd \rightarrow Check smallest value of CP
mark the answer which is greatest.

$$\text{Option (d) Ist} \rightarrow \frac{29}{60} \times 100 = 48.33$$

$$\text{Option (a) IInd} \rightarrow \frac{17}{36} \times 100$$

$$= 47.22 \text{ (wrong)}$$

242. (a) According to question,
CP = 1200
Repair = 200
Total CP = Rs. 1400
SP = Rs. 1680
Profit = 280

$$\text{Profit\%} = \frac{280}{1400} \times 100 = 20\%$$

243. (d) According to Question.
 CP of 2 dozen bananas (24 bananas) is = Rs. 32
 SP of 1 dozen bananas (12 bananas) is = Rs. 12
 SP of 18 bananas is
 Rs. 18.

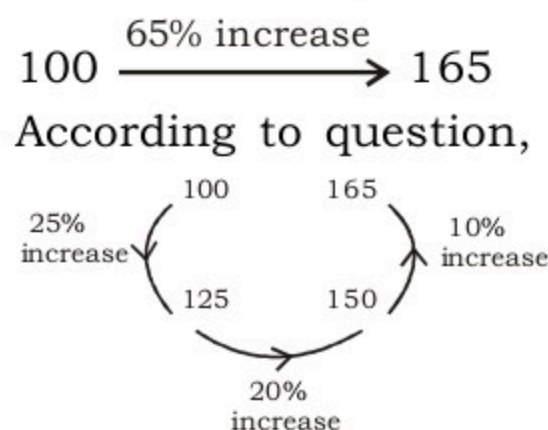
∴ Now shopkeeper reduced to the rate Rs. 4/dozen
 Now SP of 1 dozen bananas is Rs. 4
 SP of 6 bananas is Rs. 2

∴ SP of total 24 bananas is (2 dozens) is Rs. 18 + 2 = 20

$$\text{Loss} = \text{CP} - \text{SP} \\ = 32 - 20 = \text{Rs. } 12$$

$$\text{Loss\%} = \frac{12}{32} \times 100 = 37.5\%$$

244. (c) According to question, Passing through 3 hands rises on the whole by 65% mean



∴ 3rd earned profit is 10%

245. (d) According to question,
 CP of 1 cup = Rs. 10
 CP of 100 cups = 10 × 100 = Rs. 1000
 Now 20 cups are broken means
 = 100 - 20 = 80 cups
 SP of 1 cup is = Rs. 11
 SP of 80 cups are
 = 11 × 80 = Rs. 880
 ∴ Loss = CP - SP
 = 1000 - 880 = 120

$$\text{Loss\%} = \frac{\text{Loss}}{\text{CP}} \times 100 \\ = \frac{120}{1000} \times 100 = 12\%$$

246. (b) Let the original price = x per dozen
 New price = $(x - 4)$ per dozen
 Original numbers of pins
 $= \frac{48}{x}$ dozens

New numbers of pins

$$= \frac{48}{x-4} \text{ dozens}$$

According to question,

$$\frac{48}{x-4} - \frac{48}{x} = 1$$

$$48 \left[\frac{x - x + 4}{x(x-4)} \right] = 1$$

$$48 \times 4 = x(x-4)$$

$$x^2 - 4x = 192$$

$$x^2 - 4x - 192 = 0$$

$$x^2 - 16x + 12x - 192 = 0$$

$$x(x-16) + 12(x-16) = 0$$

$$(x-16)(x+12) = 0$$

$$x = 16, -12$$

∴ Original price = Rs. 16

New price = Rs. (16 - 4) = Rs. 12

Alternative

Take help from option

Option (b) = Rs 12

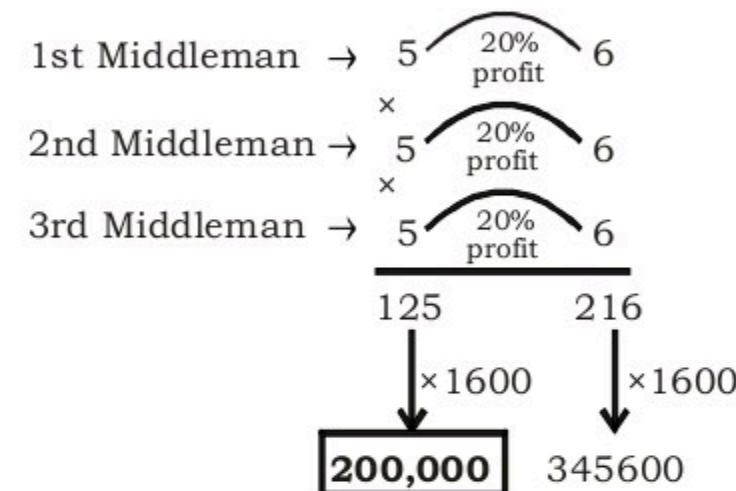
(reduction Price)

∴ Original Price = 12 + 4 = 16

Original Price	Reduced Price
$\frac{48}{16} = 3 \text{ dozens Pin}$	$\frac{48}{12} = 4 \text{ dozens Pin}$

1 dozens increase (Satisfied the question)
 Cost of Pins per dozen after reduction
 = Rs. 12

247. (d) According to question,



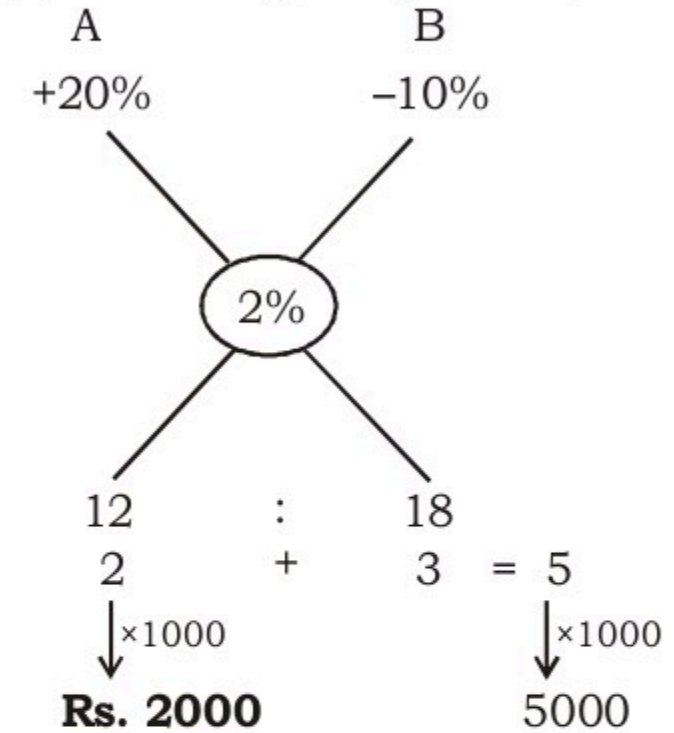
248. (d) According to question,
 Loss = 20% SP

$$\text{i.e. } \frac{\text{Loss}}{\text{SP}} = \frac{1}{5}$$

$$\therefore \text{CP} = \text{SP} + \text{Loss} = 5 + 1 = 6$$

$$\therefore \text{Loss\%} = \frac{1}{6} \times 100 = \frac{50}{3}\%$$

249. (c) According to question,



1 unit = 1000

CP of A = Rs. 2000.

250. (a) According to question,

Given, Loss

$$\text{CP} - 9400 = x \quad \dots\dots (i)$$

Profit

$$10600 - \text{CP} = 2x \quad \dots\dots (ii)$$

Put the value of eq.

(i) in eq. (ii)

$$\therefore 10600 - \text{CP} = 2$$

(CP - 9400)

$$10600 - \text{CP} = 2\text{CP} - 18800$$

$$3\text{CP} = 29400$$

$$\text{CP} = \frac{29400}{3} = 9800$$

CP = Rs. 9800

251. (c) According to question,

SP of 20 apples = Rs. 100

gained = 20%

$$\therefore \text{CP of 20 apples} = 100 \times \frac{100}{120} = \frac{250}{3}$$

$$\text{CP of 1 apples} = \frac{250}{3 \times 20} = \frac{25}{6}$$

$$\text{In 100 Rs. he buy} = \frac{100}{\frac{25}{6}} \times 6$$

= 24 apples

252. (d) According to question,

CP of 1 Pen = Rs. 50

CP of 50 Pen = Rs. 50 × 50

= Rs. 2500

to gain 10% overall sold at

= 2750

Now, 40 pen sold at 5% loss

$$\therefore \text{SP of 40 pen} = 40 \times 47.5$$

= Rs. 1900

Remaining 10 pens sold to get overall profit of 10% at
= Rs. 850.

SP of 1 (remaining pen)

$$= \frac{850}{10} = \text{Rs. } 85$$

CP of 1 pen = Rs. 50

Profit% of remaining pen

$$= \frac{35}{50} \times 100 = 70\%$$

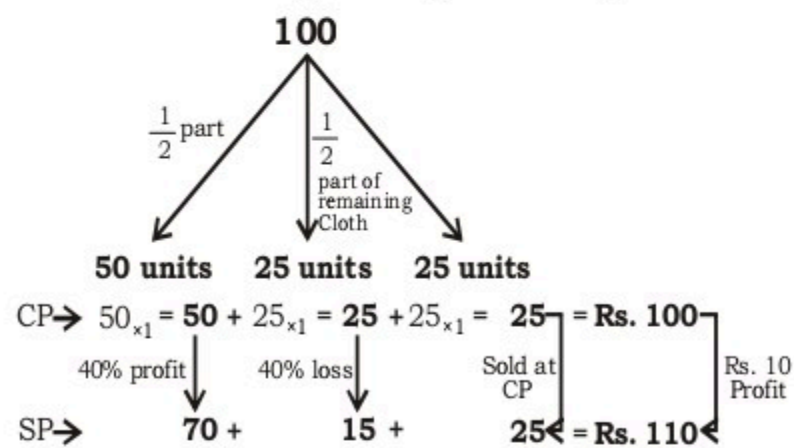
253. (c) Let total number of cloth
= 100 units

CP of 1 unit cloth = Rs. 1

CP of 100 units cloth are

$$= 1 \times 100 = \text{Rs. } 100$$

According to question,



265. (b) According to question,
 $3C + 8G = \text{Rs. } 47200 \dots(i)$
 $8C + 3G = 47200 + 53000$
 $= \text{Rs. } 100200 \dots(ii)$

Add equ. (i) and (ii)

$$11C + 11G = 147400$$

$$C + G = 13400 \dots(iii)$$

Subtract eq (i) and (ii)

$$-5C + 5G = -53000$$

$$C - G = 10600 \dots(iv)$$

Solve eq (iii) & (iv)

$$C = 12000$$

$$G = 1400$$

\therefore Cost of 1 Cow = Rs. 12000 Ans.

266. (b) Let the number of bad apples = x

$$\text{C. P. of } (240 - x) \text{ apples} = ₹ 600$$

$$\text{S. P. of } (240 - x) \text{ apples}$$

$$= ₹ 3.5 \times (240 - x)$$

According to the question,

$$\Rightarrow 3.5 \times (240 - x) - 600 = 198$$

$$x = 12$$

$$\Rightarrow x\% = \frac{12}{240} \times 100\%$$

$$= 5\%$$

Alternate

$$\text{SP of apples} = 600 + 198 = 798$$

$$\text{No. of apples sold} = \frac{798}{3.5} = 228$$

% of apples thrown

$$= \frac{240 - 228}{240} = \frac{12}{240} \times 100 = 5\%$$

267. (c) According to the question,
 40 dozen bananas means = 480 bananas

$$30 \text{ bananas rotten}$$

$$= 480 - 30 = 450$$

$$\text{bananas remaining.} = 450$$

$$\therefore \text{C.P of 40 dozen bananas} = \text{Rs. } 250$$

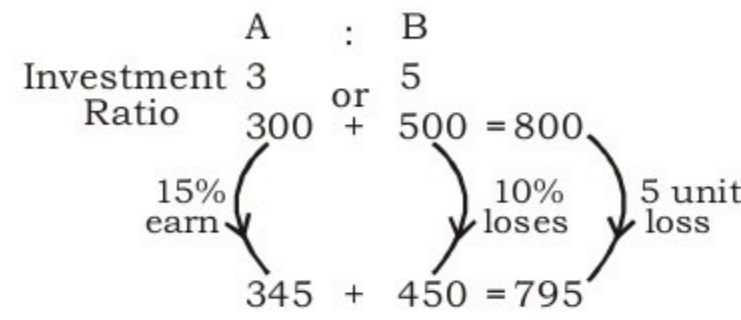
to make 20% S.P of 450 bananas

$$= 250 \times \frac{120}{100} = \text{Rs. } 300$$

$$\therefore \text{S.P of 1 bananas} = \frac{300}{450} = \text{Rs. } \frac{2}{3}$$

$$\text{S.P of 1 dozen bananas} = \frac{2}{3} \times 12 = \text{Rs. } 8$$

268. (d) According to question,



$$\text{loss}\% = \frac{5}{800} \times 100 = -\frac{5}{8}\%$$

(- sign shows loss)

269. (c) According to question,

$$\text{CP} \rightarrow 5 + x = 5 + x$$

20% profit

$$\text{SP} \rightarrow 6 + 6 = 12$$

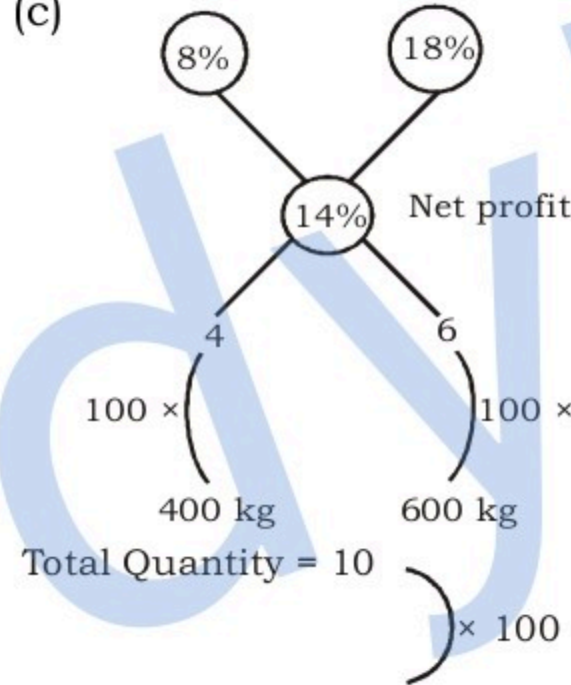
$$5 + x = 12 \text{ Because there is no profit no loss } x = 7$$

$$\text{Then loss is } 7 - 6 = 1$$

$$\therefore \text{Loss}\% = \frac{1}{7} \times 100$$

$$= 14\frac{2}{7}\%$$

270. (c)



$$8\% \text{ profit qty} = 400 \text{ kg}$$

271. (d) According to the question

$$\text{Let C.P of the article} = 100$$

$$100 \text{ (C.P)}$$

$$10\% \text{ loss}$$

$$90 \text{ (S.P.)}$$

$$\frac{\text{Original SP}_2}{\text{Reduced SP}_1} = \frac{4}{3}$$

$$3 \text{ units} = 90$$

$$1 \text{ unit} = 30$$

$$4 \text{ units} = 30 \times 4 = 120$$

$$\therefore \text{Profit}\% = \frac{20}{100} \times 100 = 20\%$$

272. (d) Let A purchase a watch = 100

$$\text{then B purchase a watch}$$

$$= 105\% \text{ of } 100 = 105$$

and C purchase a watch

$$= 104\% \text{ of } 105 = \frac{104}{100} \times 105$$

$$= \frac{52 \times 21}{10} = 109.2$$

$$109.2 \text{ units} \rightarrow 91$$

$$100 \text{ units} \rightarrow \frac{91 \times 100 \times 10}{1092}$$

$$100 \text{ units} = \frac{1000}{12} = \text{Rs. } 83.33$$

$$\text{'A' Purchase a watch} = \text{Rs. } 83.33$$

Alternate

'A' purchase a watch

$$= 91 \times \frac{100}{104} \times \frac{100}{105} = \text{Rs. } 83.33$$

273. (b) Let thr C.P of an umbrella = Rs. 100

$$\text{S.P. of an umbrella} = 120\% \text{ of } 100 = \text{Rs. } 120$$

$$\text{After Discount, S.P.} = 90\% \text{ of } 120 = \text{Rs. } 108$$

$$\text{Profit}\% = \frac{8}{100} \times 100 = 8\%$$

274. (d) Total Discount by A

$$= 20000 \times \frac{8}{100} + 16000 \times \frac{5}{100}$$

$$= 1600 + 800 = \text{Rs. } 2400$$

Selling Price of A

$$= 36,000 - 2,400$$

$$= \text{Rs. } 33,600$$

Selling Price of B

$$= 36,000 \times \frac{100 - 7}{100}$$

$$= 36,000 \times \frac{93}{100}$$

$$= \text{Rs. } 33,480$$

275. (c) Let original price is 100

$$\text{SP}_1 = 75 \quad \text{SP}_2 = 140$$

$$\text{P}\% = \frac{140 - 75}{75} = \frac{65}{75} \times 100 = 87\%$$

276. (b) 20% of M.P. = 320

$$100\% \text{ of M.P.} = 320 \times 5$$

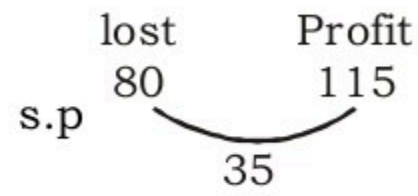
$$\text{M.P.} = 1600$$

$$\text{CP} \quad \text{SP} \quad \text{M.P.}$$

$$1000 \quad 1280 \quad 1600$$

$$\text{Profit}\% = \frac{280}{1000} \times 100 = 28\%$$

277. (c) Let S.P = 100



$$35 \rightarrow 70$$

$$1 - 2$$

$$\text{C.P} = 100 \times 2 = 200$$

$$\begin{array}{ccc} \text{278. (a)} & \text{CP} & : & \text{M.P} \\ & (100 - D\%) & : & (100 + P\%) \\ & 90 & : & 105 \end{array}$$

Percentage of Marked price above C.P.

$$= \frac{15}{90} \times 100 = 16\frac{2}{3}\% = 16.67\%$$

279. (c) C.P. = 3000

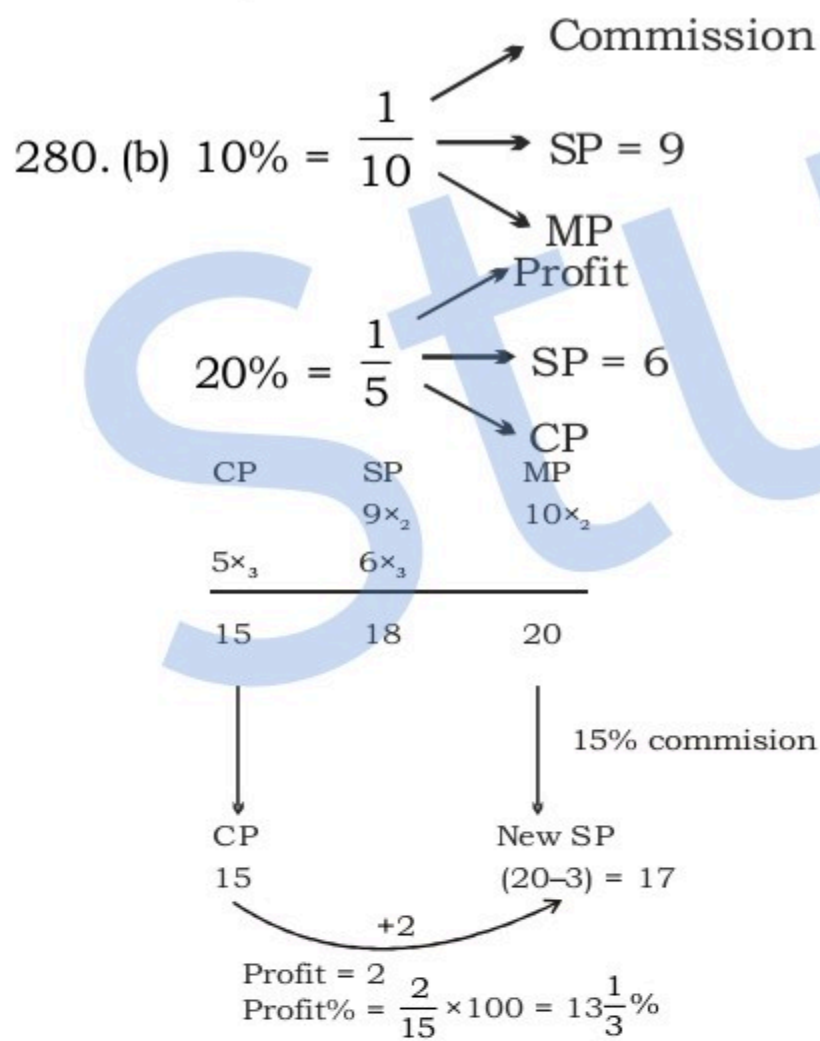
To make a profit of 20%, S.P. should be

$$\text{S.P.} = 3000 \times \frac{6}{5} = 3600$$

As 5 dozens cup were broken out of 50 dozen

So, S.P. of remaining 45 dozen cup

$$= \frac{3600}{45} = \text{Rs. } 80$$



281. (d) Let the cost price of computer table

C.P of one Chair = Rs. y

$$3x + 5y = 25500 \dots (1) \times 2$$

$$2x + 9y = 25500 \dots (2) \times 3$$

$$6x + 27y = 76500$$

$$\underline{6x + 10y = 51000}$$

$$17y = 25500$$

$$y = 1500$$

Put the value of y in equation no. 1

$$3x + 5 \times 1500 = 25500$$

$$3x = 25500 - 7500$$

$$3x = 18000$$

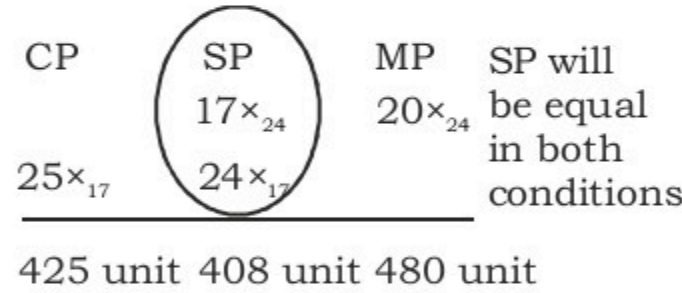
$$x = 6000$$

C.P of one computer and one

chair = x + y

$$= 6000 + 1500 = \text{₹ } 7500$$

$$\text{282. (b)} \quad 15\% - \frac{3}{20} \quad \text{and} \quad 4\% = \frac{1}{25}$$



$$\frac{12000 \times 425}{480} = 10625 \text{ Rs.}$$

283. (d) (x - 5), (x - 4), ..., x (Cost price of 6th Article, (x + 1) (x + 2). ... (x + 5)

Avg =

$$\frac{\text{Price of 1st Book} + \text{Price of 11th Book}}{2}$$

$$= \frac{x + 5 + x - 5}{2} = x$$

total C.P of 11 books = 11x

total S.P of articles = 11x

both are equal so neither profit nor loss

284. (c) Ratio of lost money in last year = 4 : 5

Ratio of lost money in last year to present year

Last yr James Vaibhav 4 : 5

Last yr : prnt. yr

James 3 : 5

Vaibhav 2 : 3

James Vaibhav

3 unit = 4 2 unit = 5

$$1 \text{ unit} = \frac{4}{3} \quad 1 \text{ unit} = \frac{5}{2}$$

$$\text{Present Ratio} \quad \frac{4}{3} \times 5 : \frac{5}{2} \times 3$$

$$\text{Present Ratio} \quad \frac{20}{3} : \frac{15}{2}$$

$$8 : 9 \Rightarrow 17 \text{ unit} \rightarrow 357000$$

$$1 \text{ unit} \rightarrow \frac{35700}{17}$$

$$8 \text{ unit} \rightarrow \frac{357000}{17} \times 8 = 168000$$

285. (b) After selling for Rs. 43.20, It gives a loss of 10%

$$90\% \rightarrow 43.20$$

$$\text{SP} = \frac{43.20}{90} \times 100 \times \frac{110}{100}$$

for gaining 10% profit = 52.80

286. (a) Selling Price of 8 articles = cost price of 10 articles

$$8\text{SP} = 10\text{CP}$$

$$\frac{\text{SP}}{\text{CP}} = \frac{10}{8}$$

$$\text{Profit percentage} = \frac{2}{8} \times 100 = 25\%$$

287. (b) Let the C.P = 100 unit

Now. M.R.P = 120 unit

$$\text{S.P} = \frac{120 \times 80}{100} = 96$$

$$\text{Loss} = 100 - 96 = 4$$

$$\text{Loss}\% = \frac{4}{100} \times 100 = 4\%$$

288. (d) CP of 10 articles = SP of 15 articles

$$\Rightarrow \frac{\text{SP}}{\text{CP}} = \frac{10}{15}$$

$$\text{Loss \%} = \frac{5}{15} \times 100 = 33.3\%$$

289. (a)

$$20\% = \frac{1}{5} \text{ profit} \quad \text{CP} \quad \text{6 SP}$$

$$6 \text{ units} \text{ --- } \text{₹ } 6000$$

$$5 \text{ units} \text{ --- } \frac{6000}{6} \times 5 = \text{₹ } 5000$$

$$25\% = \frac{1}{4} \text{ loss} \quad \text{SP} = 3 \quad \text{CP}$$

$$3 \text{ units} \text{ --- } \text{₹ } 6000$$

$$4 \text{ units} \text{ --- } \frac{6000}{3} \times 4 = \text{₹ } 8000$$

C.P of second mobile = ₹ 8000

total C.P = 8000 + 5000

= ₹ 13000

total S.P = 6000 × 2

= ₹ 12000

$$\text{Loss}\% = \frac{1000}{13000} \times 100$$

$$= \frac{100}{13} = 7.7\% \text{ (Approx)}$$

290. (c)

$$\begin{array}{ccc} \text{C.P} & : & \text{M.P} \\ (100 - \text{discount}\%) & : & (100 + \text{profit}\%) \\ \Rightarrow & & \\ 88 & : & 121 \\ 8 & : & 11 \end{array}$$

If there is no discount given, then

$$\text{M.P.} = \text{S.P.}$$

So

$$\text{Profit}\% = \frac{11-8}{8} \times 100$$

$$= \frac{3}{8} \times 100 = 37.5\%$$

291. (b)

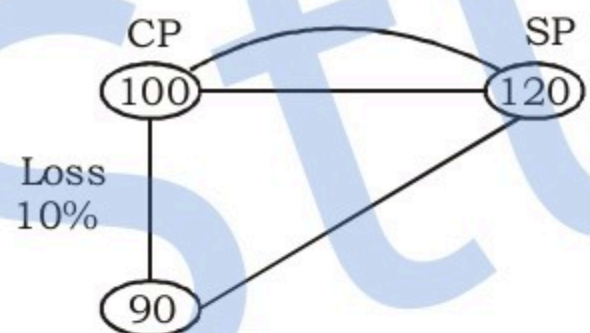
$$10\% = \frac{1}{10} \xrightarrow{\text{discount}} 9 \rightarrow \text{CP}$$

$$10\% = \frac{1}{10} \xrightarrow{\text{Profit}} \text{SP} = 11$$

CP	SP	MP
	9×11	10×11
10×9	11×9	
90 unit	99 unit	110 unit
90 unit	₹150	

$$110 \text{ units} - \frac{150}{90} \times 110 = ₹183.3$$

292. (c)



$$\text{Profit}\% = \frac{30 \times 100}{90} = 33\frac{1}{3}\%$$

293. (a) Let the price of 1st item is 'x'
then for 2nd $520 - x$
profit and loss of both items are same

$$\text{then } \frac{x \times 16}{100} - \frac{(520 - x) \times 10}{100} = 0$$

$$16x = (520 - x)10$$

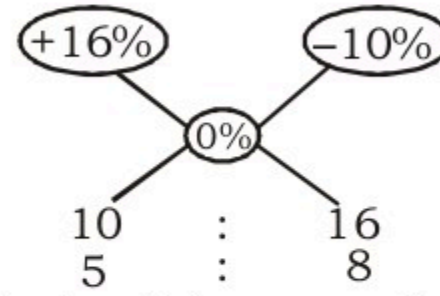
$$26x = 5200$$

$$x = 200$$

$$\text{CP} = 520 - 200 = 320$$

$$\text{SP} = 320 \times \frac{90}{100} = 288$$

Alternate

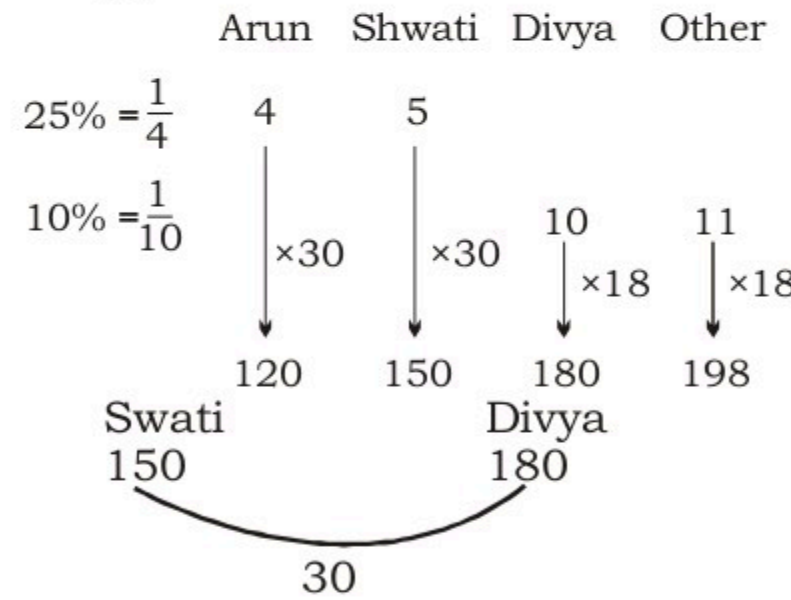


S.P of article was sell on loss

$$= \frac{8 \times 520}{13} = 320$$

$$\text{SP} = 320 \times \frac{90}{100} = 288$$

294. (b)



$$\text{P}\% = \frac{30}{150} \times 100 = 20\%$$

295. (c) Let CP = ₹100

$$\text{P}\% = 8\%$$

CP	SP	MP
100	108	120
	8	12

$$\text{Discount} = \frac{12}{120} \times 100 = 10\%$$

296. (c) Let dealer purchase 1000 gm in ₹1000
but at selling time sold = 875 gm in place of 1000 gm.
So

$$\text{P}\% = \frac{1000 - 875}{875} \times 100 = 14\frac{2}{7}\%$$

297. (a) CP	:	MP
100 - D%	:	100 + P%
100 - 5%	:	100 + 33%
95		133

$$\text{required}\% = \frac{38}{95} \times 100 = 40\%$$

298. (c) Let the price of Table is T and chair is C.

$$T + C = 500 \quad \dots(i)$$

$$C \times 10\% - T \times 10\% = 10$$

$$C \times \frac{1}{10} - T \times \frac{1}{10} = 10$$

$$C - T = 100 \quad \dots(ii)$$

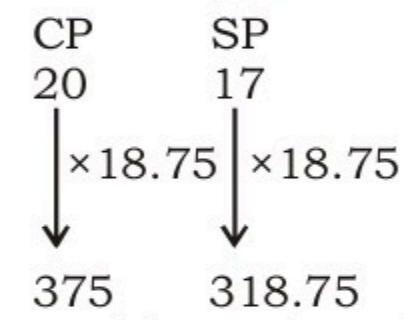
$$C + T = 500 \quad \dots(i)$$

From equation (i) and eq.(ii)

$$C = 300$$

$$T = 200$$

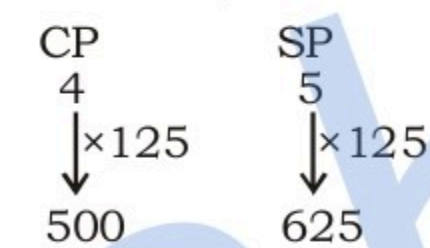
$$299. (b) 15\% = \frac{3}{20}$$



300. (b) remaining crates = $25 - 5 = 20$
So,

$$\text{CP} = \frac{10000}{20} = 500/\text{crates}$$

$$25\% = \frac{1}{4} \leftarrow \text{P}$$



301. (d) In this type of question we can find the profit % by

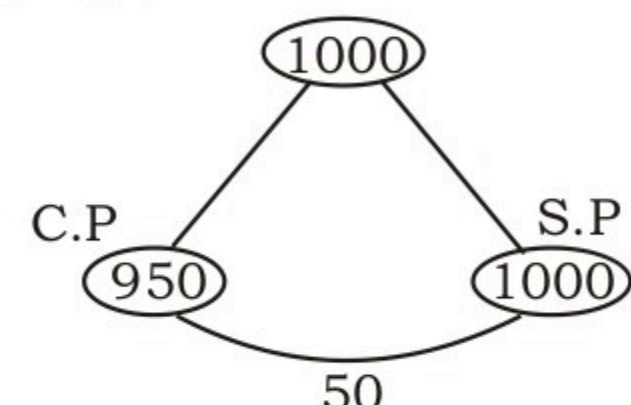
$$= \frac{\text{Less quantity}}{\text{quantity given to customer}}$$

According to question,

$$\text{Less quantity} = (1000 - 950) = 50$$

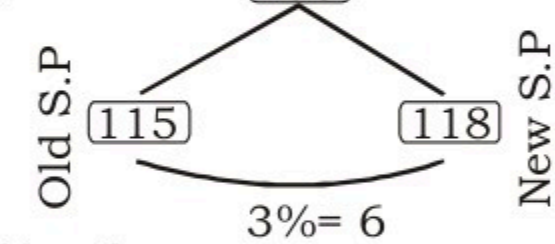
$$\text{Profit}\% = \frac{50}{950} \times 100 = \frac{100}{19}\%$$

Alternate



$$\text{Profit}\% = \frac{50}{950} \times 100 = \frac{100}{19}\%$$

302. (c)



$$3\% = 6$$

$$1\% = \frac{6}{3} = 2$$

$$100\% = 2 \times 100$$

$$\boxed{C.P = 200}$$

303. (a) equivalence % of 20%, 10%

$$= 20 + 10 - \frac{10 \times 20}{100} = 28\%$$

Now equivalence % of 28%, 5%

$$= 28 + 5 - \frac{28 \times 5}{100} = 33 - 1.4 = 31.6\%$$

304. (b) $6 \text{ SP} = 8 \text{ CP}$

$$\frac{\text{SP}}{\text{CP}} = \frac{4}{3} \Rightarrow 1 \text{ --- Profit}$$

$$P = 1$$

$$\text{profit \%} = \frac{1}{3} \times 100 = 33\frac{1}{3}\%$$

305. (c) $5\% = \frac{1}{20}$

$$\begin{array}{cc} \text{CP} = 20 & \text{SP} = 19 \\ \downarrow \times 600 & \downarrow \times 60 \\ 1200 & 1140 \end{array}$$

306. (b) Let original price is 100

$$\begin{array}{cc} \text{M.P} & \text{S.P} \\ (100) & (86) \end{array}$$

$$14 \text{ unit}$$

$$14 \text{ unit} - 42$$

$$1 \text{ unit} - 3$$

marked price or original price

$$= 100 \times 3 = 300$$

307. (c) Total CP of milk

$$= 12 \times 25 = 300$$

$$\text{Total SP of milk} = 10.4 \times 30 = 312$$

$$\text{Profit \%} = \frac{12}{300} \times 100 = 4\%$$

308. (d) SP after given 20% discount

$$= 150 \times \frac{(100 - 20)}{100} = 120$$

So,

$$120 \times \frac{x}{100} = 108$$

$$x = 90$$

$$\therefore \text{Required additional discount} = (100 - 90)\% = 10\%$$

309. (b) CP of 28 Article = SP of 21 Article

$$\frac{\text{CP}}{\text{SP}} = \frac{21}{28} = \frac{3}{4}$$

$$\text{Profit} = \text{SP} - \text{CP} = 4 - 3 = 1$$

$$\text{profit \%} = \frac{1}{3} \times 100 = 33\frac{1}{3}\%$$

$$310. (c) 20\% = \frac{1}{5} \leftarrow \text{L}$$

$$\text{So, CP} = 5 + 1 = 6$$

$$\text{SP} = 5$$

$$\text{loss on CP} = \frac{1}{6} \times 100 = 16\frac{2}{3}\%$$

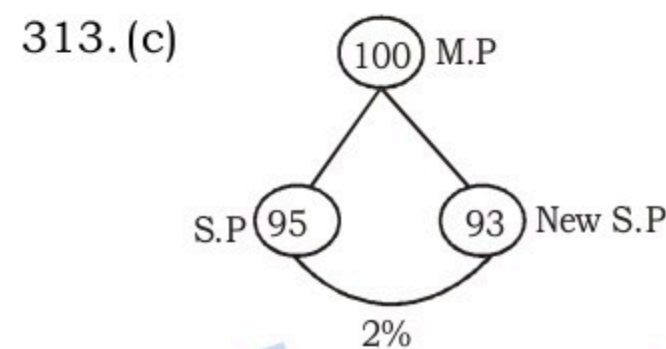
$$311. (b) \frac{\text{C.P.}}{\text{S.P.}} = \frac{10}{11} \Rightarrow 1$$

$$\text{Profit \%} = \frac{1}{10} \times 100 = 10\%$$

$$312. (a) 10\% \text{ L} = \frac{1}{10} \rightarrow \text{L}$$

$$\text{CP} = \text{S.P} - \text{L} = 10 - 1 = 9$$

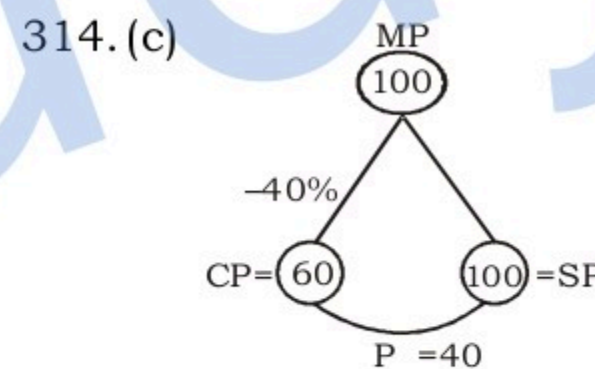
$$\text{Loss at C.P} = \frac{1}{9} \times 100 = 11\frac{1}{9}\%$$



$$2\% = 15$$

$$1\% = \frac{15}{2}$$

$$100\% = \frac{15}{2} \times 100 = 750$$



$$P\% = \frac{40}{60} \times 100 = 66\frac{2}{3}\%$$

315. (b) CP of 25 pen = S.P of 20 pen

$$\frac{\text{CP}}{\text{SP}} = \frac{20}{25} = \frac{4}{5} \Rightarrow 1 = \text{profit}$$

$$\text{profit \%} = \frac{1}{4} \times 100 = 25\%$$

$$316. (b) 6\% = \frac{3}{50} \leftarrow \text{discount}$$

$$\text{SP} = 50 - 3 = 47$$

$$\text{MP} \rightarrow 50 \text{ unit} = \text{Rs. } 7500$$

$$\text{So, SP} \rightarrow 47 \text{ unit} = \text{Rs. } 7050$$

317. (a)

CP	SP	MP
100	117	130
P		-20%

$$\text{Now Profit \%} = \frac{117 - 100}{100} \times 100$$

$$= 17\%$$

318. (c)

CP	SP	MP
100	112	140
		-20%

$$\text{Profit} = 112 - 100 = 12 \text{ unit}$$

$$12 \text{ unit} = ₹ 48$$

$$1 \text{ unit} = ₹ 4$$

$$\text{So, CP} = 100 \text{ unit} = ₹ 400$$

319. (c) $\text{CP} = 500 + 10\% \text{ of } 500$
 $= 500 + 50 = 550$

$$\frac{\text{CP}}{\text{MP}} = \frac{100 - \text{discount \%}}{100 + \text{Profit \%}}$$

$$= \frac{100 - 25}{100 + 20}$$

$$\frac{\text{CP}}{\text{MP}} = \frac{75}{120} = \frac{5}{8}$$

$$\therefore \text{CP} = 5 \text{ unit} = ₹ 550$$

$$1 \text{ unit} = ₹ 110$$

$$\therefore \text{MP} = 8 \text{ unit} = 8 \times 110$$

$$= ₹ 880$$

320. (b) Let CP = 100

CP	SP	MP
100	125	x
P		-25%

$$\text{Profit} = 125 - 100 = 25 \text{ unit}$$

$$\text{MP} = x = \frac{75}{100} = 125$$

$$\text{MP} = x = \frac{500}{3} \text{ unit}$$

$$\therefore 25 \text{ unit} = 6000$$

$$\therefore \text{MP} = \frac{500}{3} \text{ unit}$$

$$= \frac{500}{3} \times \frac{6000}{25} = 40,000$$

321. (d)

SP ₁	CP	SP ₂
355		425
x		x

$$\text{So, } 2x = 425 - 355$$

$$2x = 70$$

$$x = 35$$

$$\text{CP} = 355 + 35 = 390$$

322. (b) According to the questions

$$A \times \frac{1}{3} = B \times \frac{2}{5}$$

$$\frac{A}{B} = \frac{6}{5} \text{ (Profit ratio)}$$

$$\text{Total Profit} = 6 + 5 = 11 \text{ unit}$$

$$\therefore 11 \text{ unit} = ₹ 1650$$

$$1 \text{ unit} = ₹ 150$$

$$\therefore \text{Profit of B} = 5 \text{ unit}$$

$$= 5 \times 150 = 750$$

323. (c) According to the question

$$SP \times \frac{4}{100} = CP \times \frac{5}{100}$$

$$\frac{CP}{SP} = \frac{4}{5}$$

324. (c) \therefore 25% Fall we get 2 dozen eggs extra

$$\therefore 25\% = 2 \text{ dozen}$$

$$100\% = 8 \text{ dozen (New quantity)}$$

$$\text{So, Old quantity} = 8 - 2 = 6 \text{ dozen}$$

$$\text{rate} = \frac{162}{6} = ₹ 27$$

325. (a) $25\% = \frac{1}{4}$

	CP	SP	P/L
I	$4_{\times 3}$	$5_{\times 3}$	3
II	$4_{\times 5}$	$3_{\times 5}$	-5

[\therefore SP are same]

$$SP = 15 \text{ unit, P/L}$$

$$= 3 - 5 = -2 \text{ unit (loss)}$$

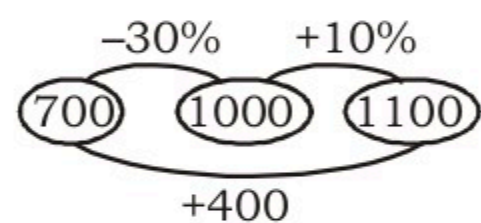
$$\therefore 15 \text{ unit} = 20,000 \text{ (SP)}$$

$$1 \text{ unit} = \frac{20,000}{15} = 1333.33$$

$$\therefore \text{Loss} = 2 \text{ unit} = 1333.3 \times 2 = 2666.6$$

So, loss more than ₹ 2000

326. (b)



$$= \frac{400}{700} \times 100 = 57 \frac{1}{7} \%$$

227. (b) According to question,

$$SP = \frac{600 \times 120}{100} = 720$$

$$MP = \frac{720 \times 100}{90} = 800$$

228. (d) According to question,

$$1500 \xrightarrow{15\%D} 1275 \xrightarrow{D\%} 1173$$

102

$$\text{Ind Discount} = \frac{102}{1275} \times 100 = 8\%$$

$$229. (b) \text{ Total Profit} = x + x + \frac{x+x}{100}$$

$$= \left(2x + \frac{x^2}{100} \right) \%$$

230. (b) According to question,

$$\frac{CP}{SP} = \frac{20}{21} \rightarrow +1 = \text{Profit}$$

$$\text{Profit \%} = \frac{1}{20} \times 100 = 5\%$$

231. (d) According to question,

$$\frac{CP}{SP} = \frac{25}{26}$$

$$\text{Profit} = SP - CP = 26 - 25 = 1$$

$$\text{Profit \%} = \frac{1}{25} \times 100 = 4\%$$

232. (d) $15\% = \frac{3}{20} \rightarrow$ Damaged quantity
Let total quantity

$$C.P = 20 \times 150 = ₹ 3000$$

Money get at 20% profit

$$= \frac{3000 \times 120}{100} = 3600$$

$$SP = \frac{3600}{(20-3)} = \frac{3600}{17}$$

$$= ₹ 211 \frac{13}{17}$$

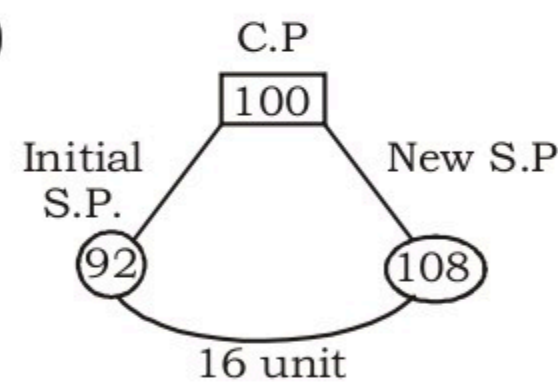
$$333. (b) \text{ Total S.P.} = \frac{750 \times 100}{100} +$$

$$\frac{750 \times 96}{100} = 795 + 720 = 1515$$

$$\text{Profit} = 1515 - 1500 = ₹ 15$$

$$\% \text{ Profit} = \frac{15}{1500} \times 100 = 1\% \text{ gain}$$

334. (c)



$$16 \text{ unit} = 28$$

$$1 \text{ unit} = \frac{28}{16}$$

$$C.P. = 100 \text{ unit} = \frac{28}{16} \times 100$$

$$= ₹ 175$$

335. (c) Wire is divided in two parts and first part is sold at 5% profit.

To gain total 10% profit

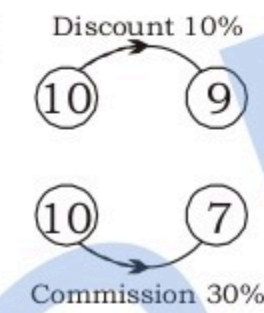
Ist Part	IInd Part	Total
5%	+ x%	= 10 × 2 = 20%

$$5x + x = 20$$

$$x = 15\%$$

IInd part would be Sold at 15%

336. (b)



$$\text{Profit} = MP (9) - SP (7)$$

$$= \frac{2}{7} \times 100 = 28 \frac{4}{7} \%$$

337. (a) % discount = 5%

$$5\% = \frac{1}{20}$$

$$\text{Then } SP = 20 - 1 = 19$$

MP is 12% above CP

$$12\% = \frac{3}{25}$$

$$\text{If } CP = 25$$

$$\text{then } MP = 25 + 3$$

$$= 28$$

CP	MP	SP
$25_{\times 20}$	$28_{\times 20}$	
	$20_{\times 28}$	$19_{\times 28}$

$$\text{given } SP = 532$$

Make MP same in both case

$$SP = 19 \times 28 \rightarrow 532$$

$$1 \rightarrow \frac{532}{19 \times 28}$$

$$CP = 25 \times 20 \rightarrow 1 \times 25 \times 20$$

$$= ₹ 500$$

338. (d) Let CP of the articles is 100

So, MP = 140% of 100

$$= \frac{140}{100} \times 100 = 140$$

Now, give 25% discount

So, SP = 140 - 25% of 140

$$= 140 - \frac{1}{4} \times 140 = 105$$

105 → 2100

1 → 20

100 → 20 × 100

$$= ₹ 2000$$

339. (c) % loss = 20%

$$20\% = \frac{1}{5}$$

It CP = 5 units

loss = 1 unit

SP = 5 - 1

= 4 unit

SP = 4,

we make it equal to CP that is (5)

so we multiply SP by = $\frac{5}{4}$

$$SP = 4 \times \frac{5}{4} = 5$$

340. (b) -30% loss +40% Profit

$$\begin{array}{c} \text{+70\%} \\ \downarrow \\ ₹140 \end{array}$$

$$70\% = 140$$

$$1\% \rightarrow 2$$

$$100\% \rightarrow 2 \times 100 = ₹ 200$$

341. (b) Total price of 510 Eggs

dozen price = ₹ 20

$$\text{Price of 510 eggs} = \frac{510}{12} \times 20$$

$$= 850$$

gain is 20%

$$\text{so gain is} = \frac{20}{100} \times 850 = 170$$

$$\text{So, SP} = 850 + 170 = ₹ 1020$$

30 eggs are broken

$$= 510 - 30 = 480$$

$$\text{so per rup. SP} = \frac{1020}{480}$$

$$\begin{aligned} \text{per dozen SP} &= \frac{1020}{480} \times 12 \\ &= ₹ 25.50 \end{aligned}$$

342. (b)

$$\begin{array}{ccc} \text{A} & \text{B} & \text{C} \\ 100 & 88 & \\ \hline & 8 \times 11 & 9 \times 11 \\ 100 : 88 : 99 & & \end{array} \quad \begin{array}{l} 12\% = \frac{12}{100} \rightarrow -88 \\ 12\frac{1}{2}\% = \frac{1}{8} \rightarrow +1 \end{array}$$

$$\text{Profit \%} = \frac{1}{100} \times 100 = 1\%$$

343. (b)

Type I
15

Type II
- 10

$$\frac{10}{3}$$

$$\frac{40}{3}$$

$$\frac{35}{3}$$

$$8 : 7 = 8+7$$

$$15 \xrightarrow{60} 900$$

$$\downarrow \times 60$$

$$\downarrow \times 60$$

$$\text{Per Price} = \frac{480}{3} = 160$$

$$\frac{420}{6} = 70$$