

Vidhigya Challenger Series
Daily Practice Sheet 8
Quantitative Techniques

Directions (1-5): Read the following information carefully and answer the questions that follow.

There are 6 articles 'A', 'B', 'C', 'D', 'E' and 'F'. The article 'A' is being sold at a discount of 25% and a mark-up of 60%. The article 'B' is being sold at a discount of 15% and a mark-up of 40%. The article 'C' is being sold at a discount of 20% and a mark-up of 65%. The article 'D' is being sold at a discount of 30% and a mark-up of 50%. The article 'E' is being sold at a discount of 15% and a mark-up of 20%. The article 'F' is being sold at a discount of 20% and a mark-up of 35%.

1. If the Cost Price of article 'A' is 450 and that of article 'D' is 500 then, find the ratio of marked price of article 'A' and 'D'.
(a) 24:25 (b) 25:24 (c) 12:25 (d) 25:12
2. If the cost price of article E is 100% more than that of article 'A' then, the marked price of 'E' is what percent more than marked price of 'A'?
(a) 40% (b) 33.33% (c) 50% (d) 55.55%
3. Selling price of the article 'C' is 528. If Marked Price of the both the articles 'C' and 'E' is same then, find the sum of selling price of both the articles 'C' and 'E'.
(a) 1089 (b) 1023 (c) 1057 (d) 1105
4. The cost price of articles B and F is 600 each. Find the total amount of profit earned on both these articles.
(a) 154 (b) 158 (c) 162 (d) Cannot be determined
5. Find the ratio of Cost Price of article F to the selling price of the same article.
(a) 16:27 (b) 16:25 (c) 25:16 (d) 25:27

Answers & Explanations

1. Ans. a

Sol. COMMON EXPLANATION

CP of A = 450

MP of A = 60% more than 450 = $450 + 270 = 720$

CP of D = 500

MP of D = 50% more than 500 = $500 + 250 = 750$

Required ratio = $720:750 = 24:25$

Hence, option (a) is correct.

2. Ans. c

Sol. Following the COMMON EXPLANATION

Let CP of A = 100

Thus, MP of A = 60% more than CP = 160

CP of E is 100% more than A = 200

Thus, MP of E = 20% more than CP = 240

Required % = $(240-160)/160 = 80/160 = 1/2 = 50\%$

Hence, option (c) is correct.

3. Ans. a

Sol. Following the COMMON EXPLANATION

Discount at article C = $20\% = 1/5$

So, MP = 5 and SP = 4

SP = 4 units = 528

1 unit = $528/4 = 132$

Thus, MP = 5 units = $5 \times 132 = 660$

So, MP of both C and E = 660

Article E was sold a discount of 15%

15% of 660 = $66 \times 3 = 99$

So, SP of E = $660 - 99 = 561$

Thus, total SP of both = $528 + 561 = 1089$

Hence, option (a) is correct.

4. Ans. c

Sol. Following the COMMON EXPLANATION

Net profit on B = 19% (calculate with the successive change formula)

Net profit on F = 8%

Total profit = 27% of 600 = 162

Hence, option (c) is correct.

5. Ans. d

Sol. Following the COMMON EXPLANATION

Let CP of the article F = 100

So, the MP = 35% more than that = $100 + 35 = 135$

A discount of 20% was offered on this

Discount = 20% of 135 = 27

SP = $135 - 27 = 108$

Ratio of CP to SP = $100:108 = 25:27$

Hence, option (d) is correct.