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Aptitude Percentage & Profit & Loss.

1) If an article is sold at a loss of 25%.
 and selling price is 450 find the cost price.

- a) 500 b) 550 c) 600 d) 650

→

$$450 = \frac{75}{100} CP$$

$$\frac{450 \times 100}{75} = CP$$

~~75~~
+5

$$600 = CP$$

$$\therefore \boxed{Ans = 600}$$

2)

A person bought an item for 1200 and sold it for 1440. what is his profit %.

- a) 10% b) 15% c) 20% d) 25%

$$\rightarrow CP = 1200$$

$$SP = 1440$$

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

$$= \frac{1440 - 1200}{1200} \times 100$$

$$= \frac{310}{1200} \times 100$$

$$= \frac{310}{12}$$

$$= \frac{24.2}{1200} \times 100$$

$$= 20\%$$

$$\therefore \boxed{\text{Ans} = 20\%}$$

3) If the selling price of an item is 960 and the cost price is 800, what is the profit - Percentage.
 a) 15 %. b) 20 %. c) 25 %. d) 30 %.



$$SP = 960 \quad CP = 800$$

$$P\% = \frac{SP - CP}{CP} \times 100$$

$$P\% = \frac{960 - 800}{800} \times 100$$

$$= \frac{160}{800} \times 100$$

$$P\% = 20\%$$

∴ Ans = 20 %

4) A Shopkeeper sells a fan at 1200 with a loss of 20 %. Find the cp.
 a) 1400 b) 1500 c) 1600 d) 1700



$$SP = 1200$$

$$Loss = 20\%$$

150

$$CP = \frac{1200 \times 100}{80}$$

$$CP = 1500$$

$$Ans = 1500$$

5) If the cost price of an article is 400 and it is sold for 480, what is the profit percentage?

- a) 15% b) 20% c) 25% d) 30%

$$CP = 400 \quad SP = 480$$

$$P\% = \frac{480 - 400}{400} \times 100$$

$$= \frac{80}{4}$$

$$Ans = 20\%$$

6) A trader gives two successive discounts of 20% and 10%. Find the net discount percentage

- a) 28% b) 30% c) 32% d) 36%

$$100 \rightarrow 80 \rightarrow 72$$

$$100 \rightarrow 120 \rightarrow 132$$

\therefore net discount Percentage = ~~32.1. 28.~~

$$\therefore \boxed{\text{Ans} = 32.1.}$$

$$\boxed{\text{Ans} = 28.1.}$$

7) A man sold a shirt for 800 after giving a 20%. discount Find the marked price
 a) 900 b) 1000 c) 1100 d) 1200

→

$$SP = 800 \quad \text{discount} = 20\%.$$

$$MP = ?$$

$$\cancel{MP} \quad MP = \frac{100}{800 \times 100} \\ 100 \\ 800 \\ 1$$

$$MP = 1000$$

$$\therefore \boxed{\text{Ans} = 1000}$$

8) A watch is sold for 1800 with 25% profit
 Find the cost price.

- a) 1200 b) 1300 c) 1400 d) 1500

$$SP = 1800 \quad P = 25\% \quad \rightarrow$$

$$CP = ?$$

$$360$$

$$CP = \frac{1800 \times 100}{360}$$

$$\cancel{125}$$

$$\cancel{25}$$

$$= 360 \times 4$$

$$CP = 1440$$

Q7 A shopkeeper marks an article at 1500 and allows 10% discount. Find selling price.

- a) 1300 b) 1350 c) 1400 d) 1450.

$$MP = 1500$$

$$\text{discount} = 10\%.$$

$$\begin{array}{r} 1500 \\ - 150 \\ \hline 1350 \end{array}$$

$$CP = 1350$$

$$\therefore \boxed{\text{Ans} = 1350}$$

10) A merchant buys 10 pens for 150 and sells them for 200. What is his profit percentage?

- a) 25%. b) 30%. c) 33.33%. d) 40%.



$$CP = 150$$

$$SP = 200$$

$$P\% = \frac{SP - CP}{CP} \times 100$$

$$P\% = \frac{200 - 150}{150} \times 100$$

$$= \frac{50}{150} \times 100$$

$$= \frac{100}{3}$$

$$Ans = 33\frac{1}{3}\%$$

11) A trader gives a 15% discount on an item and still makes a profit of 20%. What is the markup %.

- a) 30%. b) 35%. c) 40%. d) 45%.

→

let $MP = 100$. discount = 15%.

$SP = 85$

profit % = 20%.

~~GP = 20~~

$$CP = \frac{SP \times 100}{\text{profit \%}}$$

$$CP = \frac{85 \times 100}{20}$$

$$= \frac{850}{2}$$

$$= 425$$

let $CP = 100$.

$SP = 120$.

$$MP = \frac{SP \times 100}{\text{discount \%}}$$

$$MP = \frac{120 \times 100}{85}$$

$$= 17$$

$$\begin{array}{r} 60 \\ 120 \times 15 \\ \hline 108 \\ 2 \end{array}$$

$$MP = \frac{2700}{17} SP = 15.1 \cdot 5 P.$$

$$= \frac{120}{102} \cdot 18$$

~~$$SP = \frac{MP \times 15}{100} + 5$$~~

$$MP = \frac{MP \times 15}{100} + 5$$

~~$$120 = 9 \cdot 2 MP (1 - 0.15)$$~~

~~$$120 = MP (0.85)$$~~

~~$$MP = \frac{120}{0.85}$$~~

$$MP = \frac{1200}{0.85} = 141.18$$

35

$$\frac{2}{17}$$

$$\frac{2}{17} \times \frac{4}{68}$$

$$\therefore Ans = 141.18$$

$$Ans = 40.1$$

12) A table is sold for 2250 at a 10% profit
what is the Cost Price?
a) 1800 b) 1900 c) 2000 d) 2100

$$SP = 2250$$

$$CP = \frac{2250 \times 100}{110}$$

$$= 2045.5$$

$$2045.5 \times 10$$

$$CP = 2045.5$$

$$\therefore \boxed{Ans = 2000}$$

13) A Shopkeeper wants a profit of 25% on an item that Cost 800 what should be the selling price?

- a) 900 b) 1000 c) 1050 d) 1100

$$CP = 800 \quad \text{profit \%} = 25$$

$$SP = CP + CP \times \frac{25}{100}$$

$$= 800 + 800 \times \frac{25}{100}$$

$$= 800 + 200$$

$$SP = 1000$$

$$Ans = 1000$$

14) A refrigerator is sold for 15,000 at a loss of 10%. find the cost price.

- a) 16,500 b) 17,000 c) 16,000 d) 18,800

→

$$CP = \frac{15000 \times 100}{90}$$

$$= 16500.0$$

$$Ans = 16500$$

15)

An article is marked 50% above the cost price and sold at a discount of 20%. what is the profit percentage.

- a) 20% b) 25% c) 30% d) 35%

→

$$\text{let } CP = 100$$

$$MP = 150$$

$$\text{SP} \Rightarrow \text{discount} = 150 \times \frac{1}{5} \\ = 30$$

$$SP = 150 - 30$$

$$SP = 120$$

$$P\% = \frac{120 - 100}{100} \times 100$$

$$\boxed{\text{Ans} = 20\%}$$

16) A ~~dearer~~ dealer makes a profit of 12% after allowing a 5% discount. Find the marked price of article whose cost price is 400

- a) 500 b) 510 c) 520 d) 530

$$\rightarrow CP = 400 \times \frac{12}{100}$$

$$= 48$$

$$SP = 448$$

$$SP \text{ reqd} = MP - MP \times \frac{5}{100} \frac{1}{20}$$

$$448 = mp \left(1 - \frac{1}{20}\right)$$

$$448 = mp \left(\frac{19}{20}\right)$$

$$mp = \frac{24}{448 \times 20} \times 19$$

$$mp = \frac{448 \times 20}{19}$$

$$mp = 448 \times 1.05$$

$$mp = 470.4$$

Ans = 500

~~$$\begin{array}{r} 448 \\ + 1.05 \\ \hline 470.4 \end{array}$$~~

17) A book is bought for 480 and sold for 576. what is profit percentage.
 a) 15%. b) 18%. c) 20%. d) 25%.

→

$$CP = 480.$$

$$SP = 576.$$

$$P\%- = \frac{SP - CP}{CP} \times 100$$

$$= \frac{576 - 480}{480} \times 100$$

$$P\%- = \frac{96}{480} \times 100$$

$$Ans = 20\%.$$

18) If a profit of 50 Rs. is made on an article whose cost price is 500 Rs. what is profit percentage?

- a) 8%. b) 9%. c) 10%. d) 12%.

→

$$Profit = 50 \quad CP = 500$$

$$P\%- = \frac{50}{500} \times 100$$

$$Ans = 10\%.$$

- 19) A shopkeeper sells a cycle at a 15% profit and the selling price is 2300. Find cost price.
- a) 1900 b) 2000 c) 2100 d) 2200

$$2300 = \frac{115}{100} \times CP$$

$$CP = \frac{2300 \times 100}{115}$$

$$CP = 100 \times 20$$

$$CP = 2000$$

$$Ans = 2000$$

- 20) The cost price of an article is 750 and it is sold at 900 what is the gain percentage?

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

$$CP = 750 \quad SP = 900$$

$$Gain\% = \frac{900 - 750}{750} \times 100$$

$$= \frac{150}{75} \times 10$$

$$\boxed{\text{Ans} = 20\%}$$

- 21) A man sells an item at 20% loss. If the selling price is 640 find the cost price
 a) 700 b) 750 c) 800 d) 850

~~SP = 640~~

$$\text{SP} = 640 \quad \text{loss} = 20\%.$$

~~SP =~~

$$\text{e. } 640 = \frac{80}{100} \times CP.$$

$$CP = \frac{640 \times 100}{80}$$

$$CP = 800$$

$$\boxed{\text{Ans} = 800}$$

22) A trader sells a mobile phone for ₹600 at a profit of 20%. Find the cost price
 a) ₹500 b) ₹600 c) ₹800 d) ₹8500

→ $SP = ₹600$ profit = 20%.

$$₹600 = \frac{120}{100} \times CP$$

$$CP = \frac{₹600 \times 100}{120} \times \cancel{100}$$

$$CP = ₹500$$

Ans = ₹500

23) A shopkeeper sells an item for ₹500 at a 20% profit. What was the cost price

- a) ₹400 b) ₹410 c) ₹420 d) ₹430

→ $SP = ₹500$ profit = 20%.

$$₹500 = \frac{120}{100} \times CP$$

$$CP = \frac{₹500 \times 100}{120} \times \frac{6}{100}$$

$$= \frac{₹500 \times 6}{120}$$

416.6

closest to 410.

∴ $\boxed{\text{Ans} = 410}$

- 29) A man buys two articles for 1500 each. He sells one at 20% profit and other at 10%. 10% loss. Find his net profit / loss.
- a) 5% loss b) 5% profit c) 10% profit
 d) No profit, no loss

→ $A_1 = 1500$ $CP = 3000$
 $A_2 = 1500$

$$A_1 SP = 1800$$

$$A_2 SP = 1350$$

$$T SP = 3150$$

$$\therefore \text{profit} \% = \frac{3150 - 3000}{3000} \times 100$$

$$= \frac{150}{300}$$

$$= 5\%$$

$\boxed{\text{Ans} = 10\% \text{ profit}}$

$\boxed{\text{Ans} = 5\% \text{ profit}}$

25) A trader sells an article at 1250 with a loss of 12-10. Find the cost price.
 a) 1300 b) 1400 c) 1450 d) 1500

)

$$SP = 1250 \quad \text{Loss} = 12-10$$

$$1250 = \frac{88}{100} \times CP$$

$$CP = \frac{1250 \times 100}{88}$$

$$= \frac{15625}{11}$$

$$\frac{15625}{11}$$

$$CP = 1420.45$$

26) Find the profit percent earned after selling an article at double the rate for half quantity.

- a) 200%. b) 300%. c) 400%. d) 450%.

~~Set~~

100
50
200

$$P\% = \frac{200 - 50}{50} \times 100$$

$$P\% = \frac{150}{50} \times 100$$

Ans = 300%.

27) A number is multiplied by 20% of itself, the sum is then doubled. If the final value is 490. Find the number.

- a) 35 b) 40 c) 45 d) 50

~~Set~~

Let number = n .

$$2 \times n \times n \times \frac{20}{100} = 490$$

$$\frac{2n^2}{5} = 490$$

$$n^2 = \frac{490 \times S}{2}$$

$$n^2 = \frac{2450}{2}$$

$$n^2 = 1225$$

$$n = 35$$

$$\therefore \boxed{\text{Ans} = 35}$$

28) An article is sold at 20% less than the cost price. If the selling cost is 80 rupees and the selling cost is 5% of the selling price, find the loss.

- a) 150 rs b) 200 rs c) 250 rs
 d) 300 rs.



$$\text{let } CP = 100.$$

$$SP = 80$$

$$SC = 4$$

$$\frac{80}{100} \times$$

$$\begin{array}{r} SC \quad CP \\ 4 \quad 100 \\ \hline \end{array}$$

$$\begin{array}{r} 150 \quad x \\ \hline 80 \quad 50 \end{array}$$

$$A \text{ CP} = \frac{50 \times 100}{4}$$

$$A \text{ CP} = \frac{5000}{4}$$

$$A \text{ CP} = 1250$$

| | CP | SP |
|------|------|-----|
| 50 | 100 | 80 |
| A CP | 1250 | 250 |

$$A \text{ SP} = \frac{1250 \times 80}{100}$$

$$A \text{ SP} = 1000$$

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

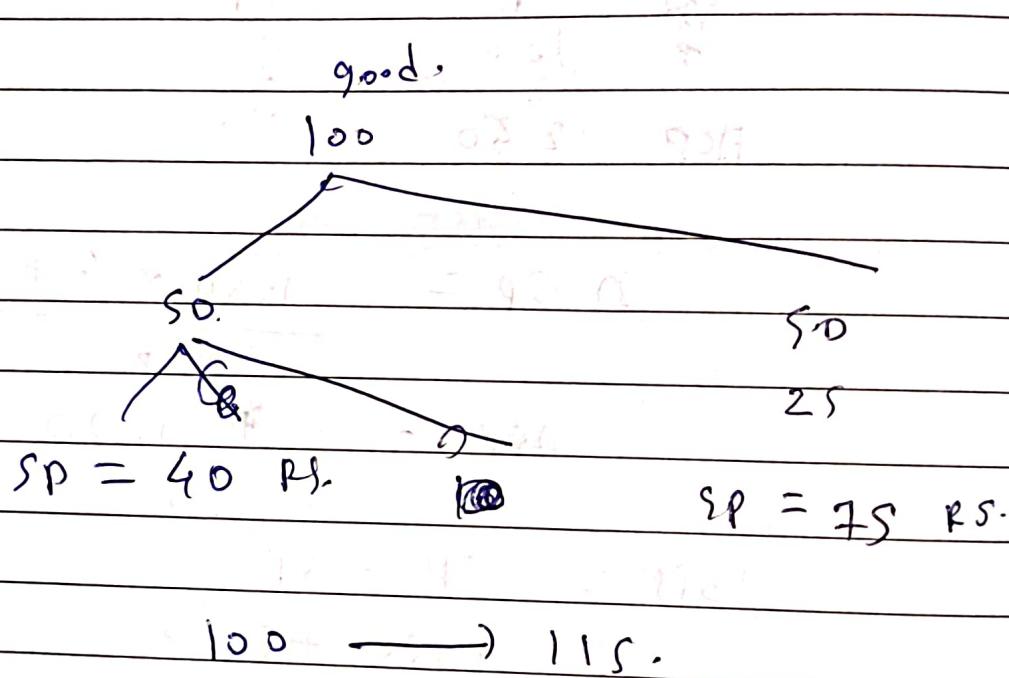
$$= 1250 - 1000$$

$$\text{Loss} = 250$$

$$\therefore \boxed{\text{Ans} = 250}$$

29> If the seller sells half of his goods at 20% loss and the rest of his goods at 50% profit, find the profit percentage on the entire transaction.

- a) 12% profit
- b) 15% profit
- c) 20% profit
- d) 25% profit



$$\therefore \boxed{\text{Ans} = 15\% \text{ profit}}$$

30> The expense of selling an article worth rs 6000 is 200 rs. If the selling expense is 10% more than loss. find loss percentage.

- a) 7.5%
- b) 8.33%
- c) 9.09%
- d) 10%

$$CP = 6000$$

$$SP = 5000$$

$$S00 = \frac{110}{100} \times L$$

$$L = \frac{500 \times 100}{110}$$

$$L = \frac{5000}{11}$$

$$\text{Loss%} = \frac{5000}{6000} \times 100$$

$$= \frac{500}{11 \times 6} \times 100$$

$$= \frac{500}{66}$$

$$\boxed{\text{Ans} = 7.5\%}$$

$$\begin{array}{r} 500 \\ \times 11 \\ \hline 5500 \end{array}$$

$$\begin{array}{r} 500 \\ \times 6 \\ \hline 3000 \end{array}$$

$$\begin{array}{r} 500 \\ \times 1 \\ \hline 500 \end{array}$$

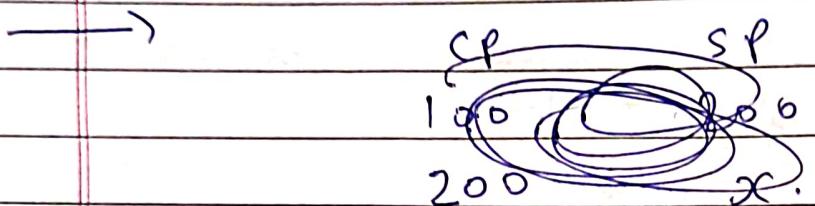
$$\begin{array}{r} 500 \\ \times 0 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 500 \\ \hline 29 \end{array}$$

31) The profit on selling 1 article is 94% to cost price of 2 such articles.

Find profit percentage.

- a) 100%. b) 150%. c) 200%. d) 227%.



~~1 → 2~~

$$\begin{array}{r} \cancel{100} \\ \hline \cancel{SP} \cdot 1 \\ 1 \rightarrow 3 \end{array}$$

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

$$\boxed{\text{Ans} = 200 \%}$$

32) The initial price of an article is decreased by 20%. but the selling price remains constant. If the initial profit was 500 rs. Find the new profit. It is known that the initial profit percentage was not 0%.

Cost price

a) 800 b) 900 c) 1000 d) 1250

$$\rightarrow \text{let } CP = 100.$$

$$\text{Profit} = \cancel{20}$$

CP

100

Profit

20

$$DC = 500$$

$$DC = 500 \times \frac{5}{100}$$

~~20~~

$$CP = DC = 2500$$

$$SP = 2500 + 500 = 3000.$$

$$\text{new CP} = \cancel{2500} 2500 - 500 \\ = 2000$$

$$\text{new CP} = 2000$$

$$SP = 3000.$$

$$\boxed{\text{new profit} = 1000}$$

$$\boxed{Ans = 1000}$$

33) The price of a pair of slipper is decreased by 10%. and the selling price is constant. If the initial profit percentage was equal to 25%. find the new profit percentage.

- a) 35%. b) 38.8%. c) 40%. d) 42%.

$$\text{let initial CP} = 100$$

$$\text{Profit} = 25$$

$$SP = 125$$

$$\text{new CP} = 90$$

$$\text{new P.Y.} = \frac{125 - 90}{90} \times 100$$

$$= \frac{35}{90} \times 100$$

$$= 35 \times 1.11$$

$$= \frac{38.85}{38.85}$$

$$\therefore \boxed{\text{Ans} = 38.8\%}$$

34) The cost price of an article is doubled, and the selling price is made half. If the initial profit percentage was 500%.
find the profit %. now

- a) 25%. b) 50%. c) 100%. d) 250%.

let init cp = 100

init profit = 500

init sp = 600

new sp = 300

new cp = 200

$$\text{new profit \%} = \frac{300 - 200}{200} \times 100$$

$$= \frac{100}{2}$$

Ans = 50%

35) A shopkeeper increases the price of sugar by 25%. By how much a family should decrease their consumption to maintain the regular price?

- a) 25% increase b) 25% decrease
 c) 20% increase d) 20% decrease.

→

$$\begin{array}{r} \text{CP} \xrightarrow{\text{25% increase}} \text{SP} \\ \text{CP} \rightarrow 100 \rightarrow 125 \\ \text{Consumption} \rightarrow 125 \rightarrow 100 \end{array}$$

$$\frac{25}{125} \times 100$$

$$\frac{1}{5} \times 100$$

$$\boxed{\text{Ans} = 20\%}$$

36) The profit on selling 15 articles is equal to the cost price of 2 articles. Find profit %.

- a) 11.11% b) 12.22% c) 13.33%
 d) 14.44%

→

$$SP \times 15 = CP \times 2$$

$$\frac{SP}{CP} = \frac{2}{15}$$

$$SP : CP = 2 : 15$$

$$\text{Profit \%} = \frac{2}{15} CP - CP \times 100$$

let CP of 1 article. = x .

$$CP \text{ of } 15 \text{ article} = 15x$$

$$\text{Profit} = 2x \text{ of } 15 \text{ article}$$

$$\text{Profit 1 article.} = \frac{2x}{15}$$

$$SP = x + \frac{2x}{15}$$

$$SP = \frac{17x}{15}$$

$$\text{Profit \%} = \frac{\frac{2x}{15}}{x} \times 100$$

$$= \frac{2x}{15x} \times 100$$

$$\text{P.V.} = \frac{200}{15}$$

$\text{Ans} = 13.33\text{--}1.$

37) 40% of a number A is 50% of a number B find the value of $A:B$.

- a) 2:3 b) 1:4 c) 1:5 d) 3:5

→

$$A \times \frac{40}{100} = B \times \frac{50}{100}$$

$$\frac{A}{B} = \frac{50}{40}$$

$$\frac{A}{B} = \frac{5}{4}$$

∴ Ans = 5:4

38) The marked price of article is 5 times the discount. Find the selling price in terms of discount.

- a) 2.5 times b) 3.5 times c) 4 times
d) 5 times

ret discount = 20.

$$mp = 100$$

$$sp = 100 - 20$$

$$sp = 80$$

Ans = 4 times the discount

39) Solve for x; $xc = 20\% \text{ of } 12\% \text{ of } 120\% \text{ of } 6250.$

- a) 270 b) 225 c) 200 d) 180

→

$$xc = \frac{20}{100} \times \frac{12}{100} \times \frac{120}{100} \times 6250$$

$$= \frac{144 \times 2 \times 625}{100 \times 20} \times 125$$

$$= \frac{144 \times 125}{100} \times 20$$

$$= \frac{72 \times 25}{10}$$

$$= 72 \times 25$$

Ans = 180

- 40) A Shopkeeper purchased an article for 500 rs. At what ~~rupees~~ price should he mark the article to allow a discount of 35% and still earn 100% profit.
- a) 1539 rs. b) 1593 rs. c) 1555 rs.
 d) 1599 rs.

$$CP = 500$$

$$\text{Profit} = 500$$

$$SP = 1000$$

~~MP~~

$$SP = MP - \left(MP \times \frac{35}{100} \right)$$

$$1000 = MP \left(1 - \frac{35}{100} \right)$$

$$1000 = MP \left(1 - \frac{7}{20} \right)$$

$$1000 = MP \left(\frac{20 - 7}{20} \right)$$

$$1000 = MP \left(\frac{13}{20} \right)$$

$$mp = \frac{1000 \times 20}{13}$$

$$= 1000 \times 1.5384$$

$$\boxed{\text{Ans} = 1539 \text{ Rs.}}$$

(1) A is 25% more than B. By what percent. B is smaller than A.

- a) 13.33% b) 20% c) 22% d) 30%

\Rightarrow

$$A = B + B \times \frac{1}{4}$$

$$A = \frac{5B}{4}$$

$$B = \frac{4}{5}A$$

$$\boxed{\text{Ans} = 20\%}$$

$$\cancel{A = 1.25B}$$

$$\cancel{A - B}$$

$$4 : 5$$

$$5 : 4$$

$$\frac{1}{5} \times 100$$

$$\boxed{\text{Ans} = 20\%}$$

42) If the discount is twice the cost price and the marked price is 10,000 ; find the selling price No profit or loss is made

- a) 1111.11
- b) 3333.33
- c) 5555.55
- d) 7777.77

Let $CP = 100$

~~MP~~ discount = 200

$SP = MP - \text{discount}$

$SP = CP = 100$

$100 = MP - 200$

$300 = MP$

MP SP

300 100

10,000 x

3333.33

$x = \frac{100 \times 10,000}{300}$

$\therefore \text{Ans} = 3333.33$

437 The cost price of an article is 30% less than the selling price. The discount is 40% of the selling price. If the marked price is 12600 rs. Find cost price.

- a) 6300 b) 10,000 c) 8,400 d) 5600

→ $SP = 100$

$CP = 70$

Discount = 40

$MP = 140$

$$\begin{array}{ccc}
 MP & CP \\
 140 & 70 \\
 12600 & x
 \end{array}$$

$$\begin{aligned}
 x &= \frac{12600 \times 70}{140} \\
 &= \frac{12600}{2} \\
 &= 6300
 \end{aligned}$$

$\therefore \boxed{Ans = 6300}$

647 If 33.33% of a number is 20 more than 16.66% of the number, find 120% of the number.

- a) 121 b) 139 c) 144 d) 169.

$$\rightarrow \frac{33.33}{100} x = 20 + \frac{16.66}{100} x$$

$$\frac{33.33}{100} x = 2000 + \frac{16.66}{100} x$$

$$33.33 x = 2000 + 16.66 x$$

$$33.33 x - 16.66 x = 2000$$

$$16.67 x = 2000$$

$$x = \frac{2000}{16.67}$$

$$= \frac{2000}{17} \\ = 11$$

$$\frac{1}{3}x = 20 + \frac{1}{6}x$$

$$\begin{aligned} \cancel{\frac{1}{3}x} &= \cancel{20} + \cancel{\frac{1}{6}x} \\ \cancel{\frac{1}{3}x} &= \cancel{\frac{1}{6}x} \\ x &= \cancel{\frac{1}{6}x} \times \cancel{3} \\ &= x = \cancel{\frac{1}{2}x} \\ 2x &= 120 \end{aligned}$$

$$\frac{1}{3}x - \frac{1}{6}x = 20$$

$$\frac{6x - 3x}{18} = 20$$

$$\frac{3x}{18} = 20$$

$$x = \frac{20 \times 18}{3}$$

$$x = 120$$

$$\frac{120}{120} \times 120$$

$$\boxed{\text{Ans} = 144}$$

45) Find the number if 20% of number is 20 more than 20% of another number.

- 20
a) 100 b) 110 c) 120 d) 125



$$\frac{1}{5} \times x = 20 + \frac{1}{8} \times 20$$

$$\frac{x}{5} = 24$$

$$x = 24 \times 5$$

$$x = 120$$

Ans = 120

46) A number if doubled then tripled this process is repeated twice what is percent change.

- a) 3500%. b) 3000%. c) 2500%.
d) 1750%.



$$100 \rightarrow 200 \rightarrow 600 \Rightarrow 1800 \Rightarrow 12000$$

$$\frac{12000 - 100}{100} \times 100$$

$$600 \rightarrow 1200 \rightarrow 3600$$

$$3600 \rightarrow 7200 \rightarrow 21600$$

$$21600 - 100 \quad \times 100$$

$$\text{Ans} = 21600 \%$$

47) By how much should 234 be reduced to make it 65% of itself

- a) 80.9 b) 81.9 c) 82.9 d) 83.9

→

$$\begin{aligned}
 x \times 65 &= 234 \times 100 \\
 x &= \frac{234 \times 100}{65} \\
 &= 234 \times 1.53 \\
 &= 360
 \end{aligned}$$

~~65~~ ~~65~~ ~~195~~ ~~260~~

$$234 - x = 65\% \text{ of } 234.$$

$$234 - x = 0.65 \times 234.$$

$$234 - x = 152.1$$

$$x = 234 - 152.1$$

$$x = 81.9$$

$$\therefore \boxed{\text{Ans} = 81.9}$$

48) what is 90% of 900% of 9000% of 9.

- a) 7290, b) 729, c) 6156, d) 6561

→

$$\frac{90}{100} \times \frac{900}{100} \times \frac{9000}{100} \times 9$$

$$= 81 \times 81$$

~~81
+ 81

162
+ 81

6561~~

$$\therefore \boxed{\text{Ans} = 6561}$$

497 out of 25 employees of company 13 are set off and the salaries of rest of employees is increased by 25%. Find total increase of decrease in companies expenditure
 a) 40.48 decrease b) 40.44 increase
 c) 44.48 decrease d) 44.84 % increase.

let salary = 100.

Employee = 25.

$$\text{Sal of 1 emp} = \frac{100}{25} = 4 \text{ per emp.}$$

$$\text{laid off} = 13 \times 4$$

$$= 52$$

$$\text{remain sal} = \cancel{100} - 52$$

$$= 48$$

$$\text{rem. incre} = 48 + 48 \times 25$$

$$100$$

$$= 48 + 11.52$$

$$= 59.52$$

$$100.00$$

$$59.52$$

$$\boxed{\text{Ans} = 40.48}$$

So, 204m bought tickets to concert for 3500. He wants to sell them at a discount of 15%. What is the discount in

Rs.

- a) 1525 b) 350 c) 525 d) 1050



$$disc = 3500 \times \frac{15}{100}$$

$$= 35 \times 15$$

$$Ans = 525$$