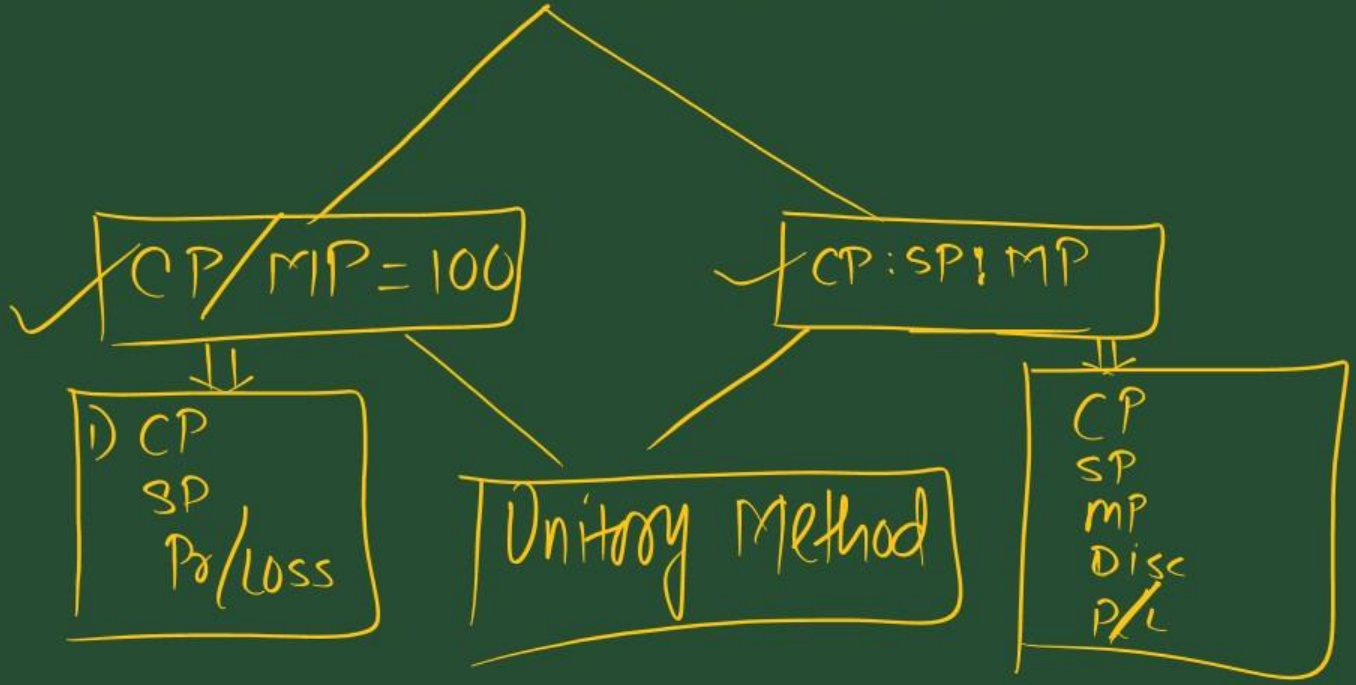
Profit and Loss

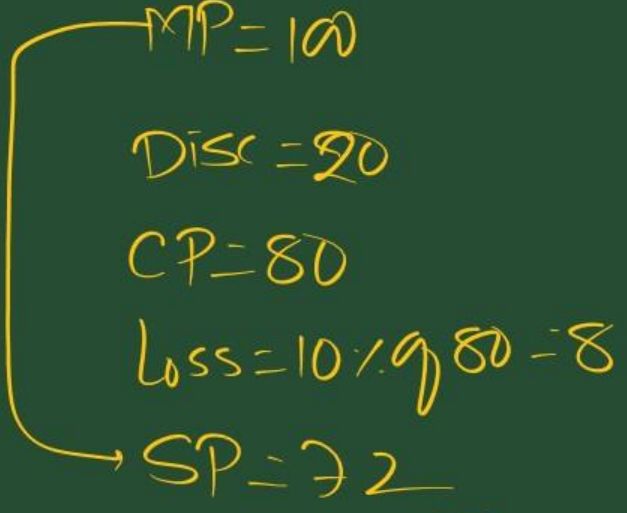


Cost Price	Selling Price	Profit /Loss	Profit/ Loss (%)
1500	2400	900	$\frac{9}{15} \times 100 = 60\%$
2500	2900	400	$\frac{4}{25} \times 100 = 16\times$
2800	2450	-350	$\frac{350}{2800} = 12.5\%$
1200	1600	400	$\frac{4}{12} = 33\frac{1}{3}\%$
2000	1800	-200	$\frac{2}{20} \times 100 = 10\%$
5000	6000	1000	20 %
350	210	140	-40 %
	1440		20 %

Cost Price	Marked Price	Discount	Selling Price	Profit/Loss	Profit/Loss %
1200	1500	60	1440	240	20%
1500	2000	200 (10%)	1800	300	20%
2500	3000	10 % = 1/10	2700	200	8%
2400	3600	600 (16 2/3%)	3000	600	25%
3750	6000	25 % 1/4	4500	750	20 % 1/5
5000	4200	16 2/3 % 1/6	3500	-1500	30%
19000	20000	24 % 24/100	15200		-20 % 1/5
25000	35000	20 % 1/5	28000	3000	12 %

A sold an article with 10% loss on the cost price. He bought the article at a discount of 20% on the labelled price. What would have been the percentage loss had he bought it at the labelled price?

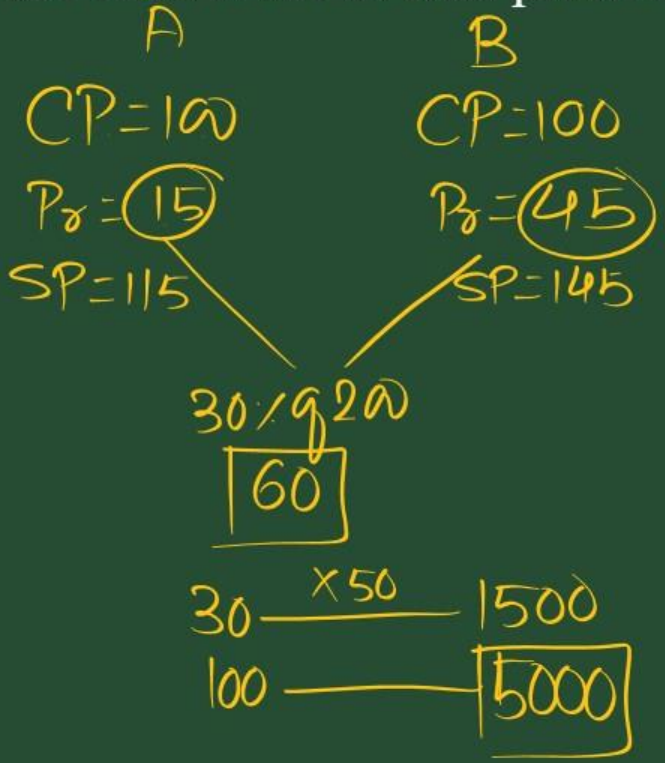
A) 34%
B) 18%
C) Data inadequate
D) 28%
E) 16%



$$= \frac{28}{100} \times 100 = 28\%$$

Cost price of two articles is same. One is sold at a profit of 15% and the other for Rs. 1500 more than the first. If the overall profit is 30%. Find the cost price of each article.

1. Rs. 4,500
B) Rs. 5,000
C Rs. 4,800
D) Rs. 4,600
E) Rs. 5,400

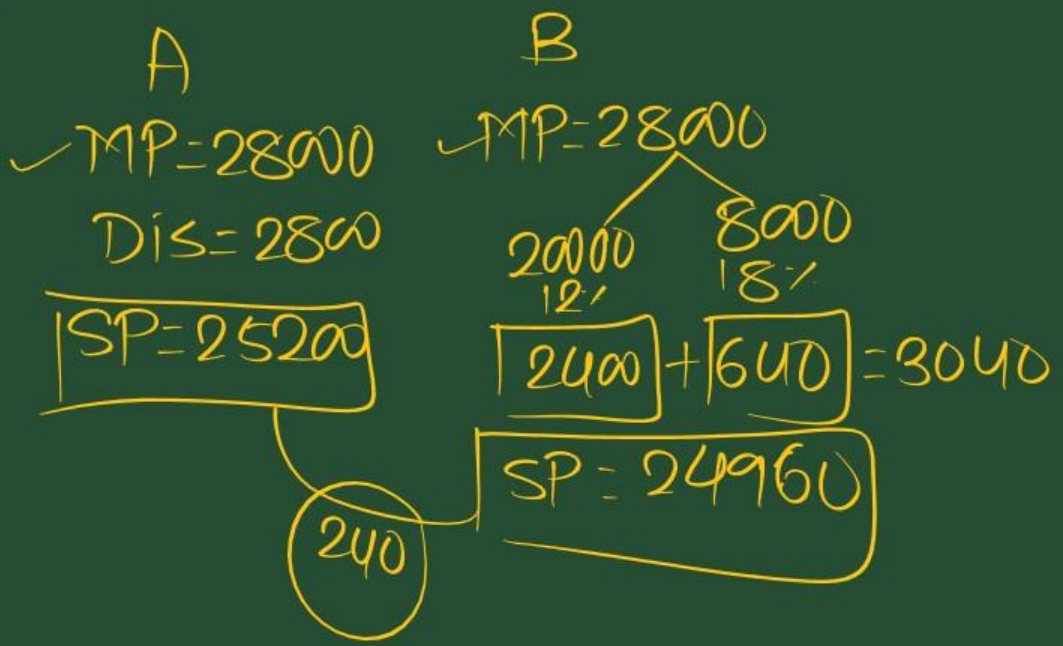


Ramakant dealing in bedsheets allows 4% discount on the marked price. What price must be marked on a bedsheet that cost Rs. 480 so as to make a profit of 10%?

A) Rs 520
B) Rs 650
C) Rs 620
D) Rs 550
E) None of these

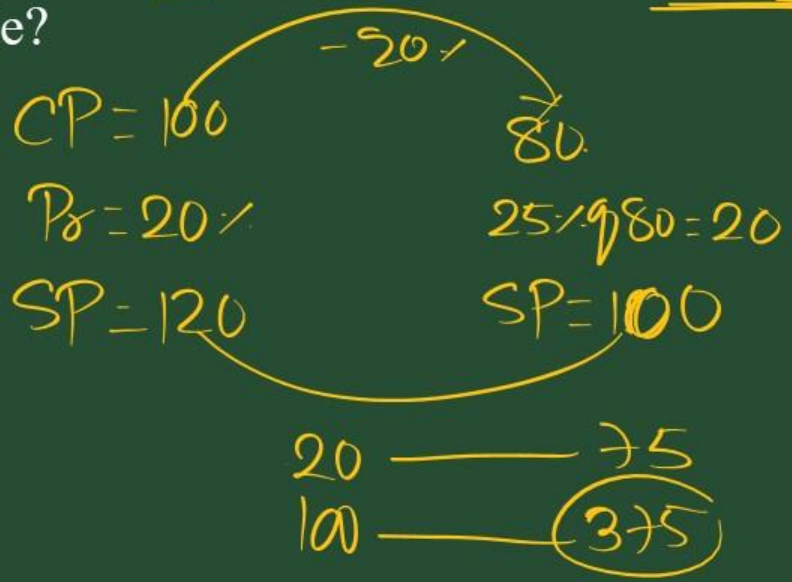
$\frac{CP}{SP} = \frac{10}{11} \quad \begin{matrix} 480 \\ 528 \end{matrix}$ $\frac{MP}{SP} = \frac{25}{24} \quad \begin{matrix} \times 22 \\ \times 22 \end{matrix} \quad \begin{matrix} 550 \\ 528 \end{matrix}$

A and B both are dealers of Honda Motorcycles. The price of an used Honda Motorcycle is Rs.28,000. A gives a discount of 10% on whole, while B gives a discount of 12% on the first Rs. 20,000 and 8% on the rest Rs. 8000. What is the difference between their selling prices? (A. Rs.240 B. Rs.420 C. Rs.640 D. Rs.740 E. None of these)



A man buys an article and sells it at a profit of 20%. If he had bought it at 20% less and sold it for Rs. 75 less, he would have gained 25%. What is the Cost Price of the article?

a) 375
b) 300
c) 250
d) 275
e) 225



A and B, there are two companies, selling the packs of cold-drinks. For the same selling price A gives two successive discounts of 10% and 25%. While B sells it by giving two successive discounts of 15% and 20%. What is the ratio of their marked price?A. 143 : 144B. 19 : 11C. 136 : 135D. 73 : 77E. None of these

A

$MP = x$

$D_1 = 10\%$

$D_2 = 25\%$

B

$MP = y$

$D_1 = 15\%$

$D_2 = 20\%$

$$x \times \frac{9}{10} \times \frac{3}{4} = y \times \frac{17}{20} \times \frac{4}{5}$$

$$\frac{x}{y} = \frac{136}{135}$$

Ram bought a Swift D'zire car with an exchange offer. The sale price of the car was Rs. 8 lacs. He availed 20% discount from the showroom and then 10% reduction in price for his old car. He spent 10% of the cost on the interiors and stereo system. After a month he sold the car to his friend Dev for Rs. 6.4 lacs. Find his profit or loss percentage into this transaction.

a) 2 %
b) 1 %
c) 10 %
d) 3 %
e) 4 %

MP = 8,00,000
D_1 = 20%
MP = 6,40,000
D_1 = 10%
MP = 5,76,000 + 10% of 5,76,000

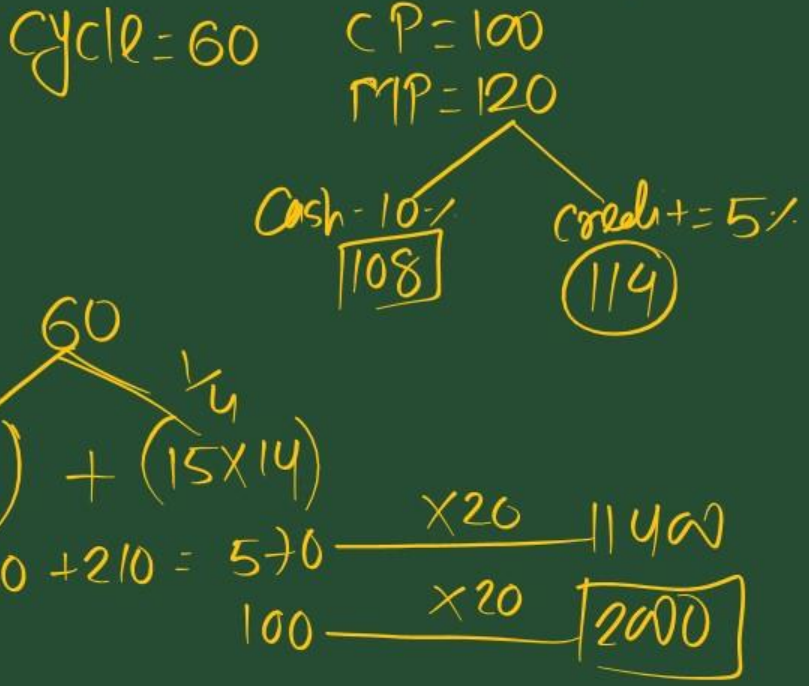
$8,00,000 \times \frac{4}{5} \times \frac{9}{10} \times \frac{11}{10} = 6,33,600 = CP$

SP = 6400 ← 1%

CP = 633600
SP = 6,40,000
6400 — 1%

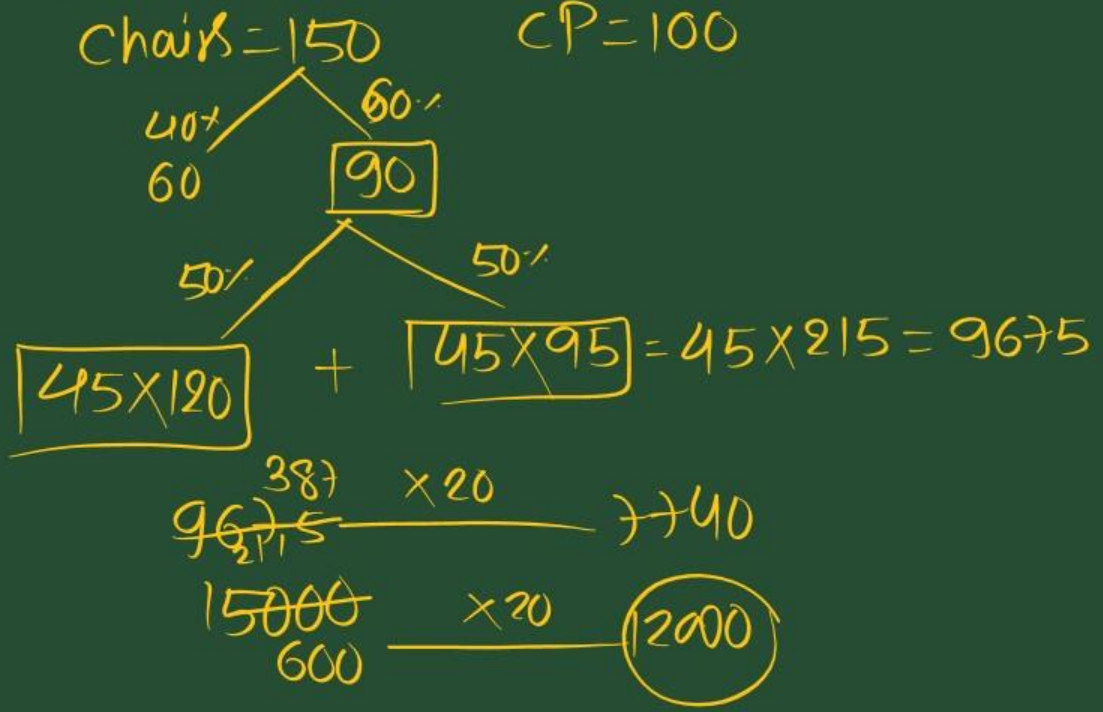
A shopkeeper buys 60 cycles and marks them at 20% above the cost price. He allows a discount of 10% on the marked price for cash sale and 5% discount for credit sales. If three-fourth of the cycles are sold at cash and remaining for credit, the total profit be Rs. 11400. What is the cost price of a cycle?

a) 1000
b) 1500
c) 2000
d) 4000
e) None of these



A man purchased 150 chairs, each costing the same, but 40% of them are damaged which cannot be sold. He sold 50% of the remaining at 20% profit each and remaining at 5% loss each. If the total selling price of chairs is Rs. 7740, then what was the total cost price of all chairs?

A) 10000
B) 12000
C) 13000
D) 15000
E) 14000



Caselet:- Ramu and Shyamu decide to sell their cars each at Rs. 36,000. While Ramu decided to give a discount of 8% on the first Rs. 8000, 5% on next Rs. 12000 and 3% on the rest to buyer Shashi.Shyamu decided to give a discount of 7% on the first 12000, 6% on next 8000 and 5% on the rest to buyer Rajesh. These discounts were, however, subject to the buyers making the payment on time failing which the discount gets reduced by 1% for every delay of a week. In each case, the selling price of 36,000 was arrived at by increasing the cost price by 25%

	Ramu	Shamu
CP-4	28800	28800
MP-5	36000	36000

D_1 8000 @ 8% = 640
D_2 12000 @ 5% = 600
D_3 16000 @ 3% = 480
1720

840 @ 7% = 12000
480 @ 6% = 8000
800 @ 5% = 16000
2120

Ramu

CP = 28800

SP = 36000 − 1720 = 34280

$P_g = \frac{5480}{28800} \times 100 = 19\%$

Caselet:- Four shopkeepers John, Johny, Jimmy and Jack buy air conditioners (ACs) from the same wholesaler at the same rate. However, this time Jack managed to get a discount of 5% from the wholesaler and got the ACs at the rate of Rs. 28,500 per AC. By selling the ACs, John earns a profit of 15% while Johny earns a profit of 18%. Jimmy marked the price 20% more than the cost price and offered a discount of 10% while Jack marked the price 25% more than the cost price and offered two successive discounts of 10% each.

	MP	DISC	CP	SP	P/L
John	3000	—	3000	34500	15% (4500)
Johny	3000	—	3000	3540	18% (540)
Jimmy	3000	—	3000	3240	8% (240)
Jack	30000	5%	28500	$28500 \times \frac{5}{4} \times \frac{9}{10} \times \frac{9}{10}$	

1) If each of them got the payments on time, what is the approximate percentage profit of the person getting the higher profit ?

1. 19% B) 21% C) 25% D) 17% E) 20%

2) If Shashi defaults by 1 and 2 weeks in the second and third payments respectively, what would be the profit of Ramu in the sale of the car ?

A) Rs. 5920 B) Rs. 6240 C) Rs. 5860 D) Rs. 5980 E) Rs. 5940

Ramu = 5480 + 120 + 320 = 5480 + 440

= 5920

II → 12000 — 5% / 1% – 120

III → 16000 — 3% / 2% – 320

1) On a particular day, John sold 5 ACs and Jimmy sold 9 ACs. What is the difference between the net profit earned by John and Jimmy on that day?

a) 600 b) 800 c) 900 d) 700 e) None

2) What is the difference between the profit percent earned by Johny and Jimmy?

a) 10% b) 5% c) 8% d) 15% e) None

3) If you plan to purchase an air conditioner, you will get the best deal from which of the shopkeepers?

a) John b) Johny c) Jimmy d) Jack e) None

4) If Jimmy sells three ACs on a particular day, how much profit did he earn that day?

a) Rs. 7,900 b) Rs. 7,200 c) Rs. 8,500 d) Rs. 7,800 e) None

5) Which shopkeeper will earn the highest profit % on a day if all of them sell 10 ACs each on that day?

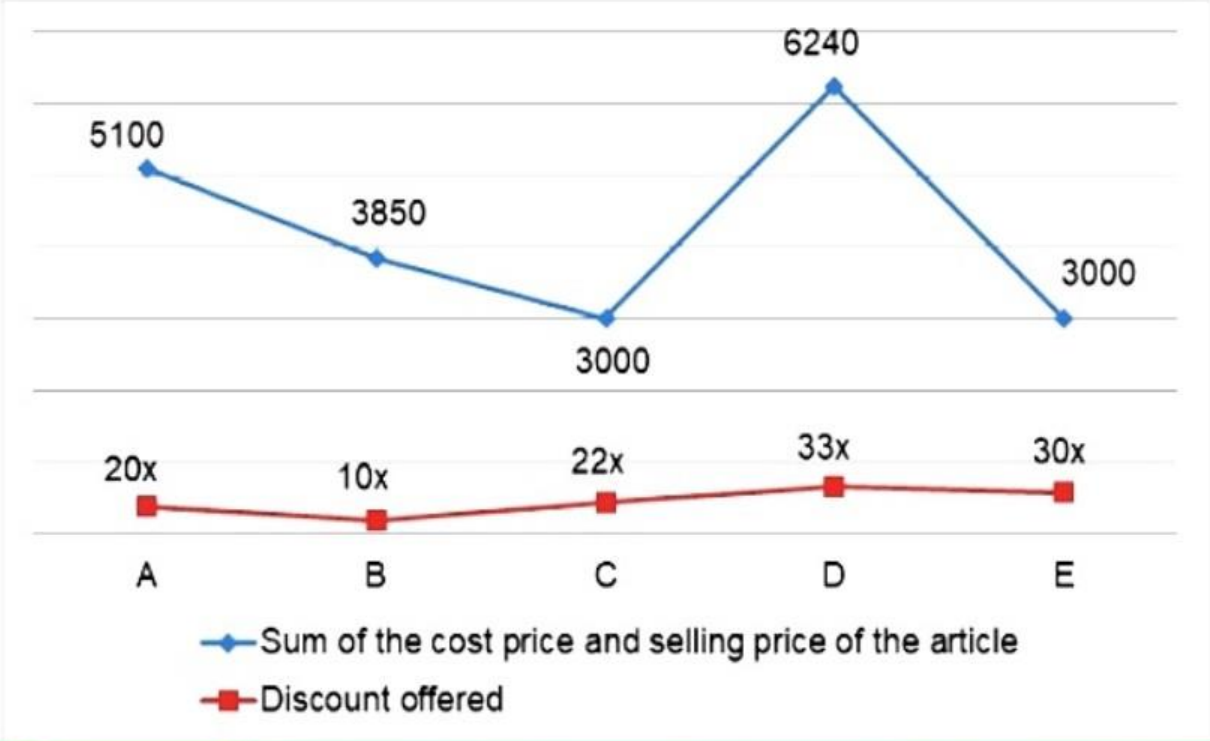
a) John b) Johny c) Jimmy d) Jack e) None

Caselet DI:- Gaurav, a sweet seller, bought some quantity of three types of sweets Rasgulla, Rasmalai and Kalakand in ratio of 6 : 10 : 9. Kalakand costed him a total of Rs. 18,900 at rate of 420 per kg. By selling Kalakand at a discount of 5% he earned a profit of On Rasmalai (which was marked Rs. 500 per kg) he earned Rs. 5 less profit per kg as compared to that on Kalakand by selling Rasmalai at 10% discount. Gaurav spent a total of Rs. 46,400 on buying these sweets, while he earned a total profit of Rs. 5875 on selling all bought sweets. Rasgullas were marked 40% above cost price per kg.

- Find the average cost price of three sweets together ?
- If Gaurav gave an extra discount of 20% on Kalakand, then his gain% or loss% was
- Find the total quantity of sweets bought by Gaurav ?
- If 10kg of Rasmalai was wasted away due to some reason. Find profit% or loss% by selling the remaining Rasmalai as per given condition.
- Cost price per kg of Kalakand was what percent less than marked price per kg of Kalakand ?

The given line graph shows the sum of the cost price and selling price, and the discount offered on five different articles.

The sum of the discounts offered on all these articles is Rs. 2300.



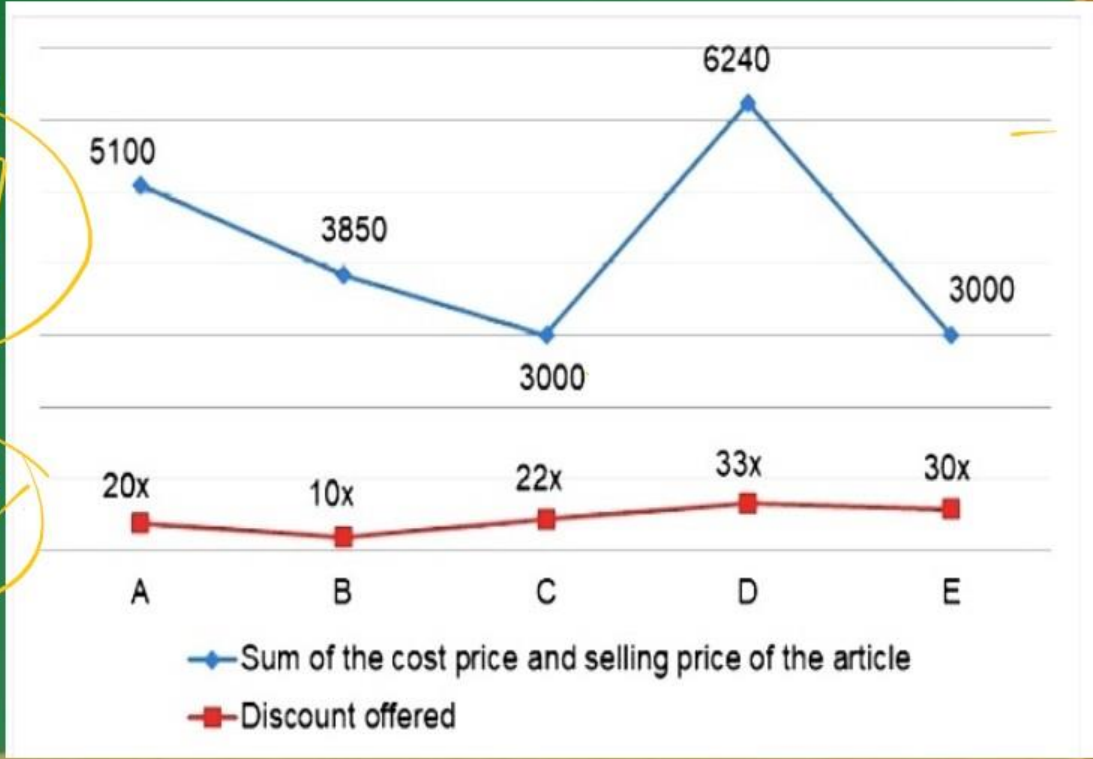
The selling price of article ‘C’ is Rs. 200 less than its cost price. If the cost price of the article ‘C’ had been 25% more and the amount by which article C has been marked up is 15% more than the original, then find the profit/loss percent if the discount offered on the article remained the same.

a) 9.6%
b) 7.4%
c) 8.2%
d) 6.25%
e) e) 5.8%

CP = 1600 → ↑25% → CP = 2000

SP = 1400
Disc = 440
MP = 1840 → 276 → 2110

CP = 2000
SP = 1676
Loss = 16.2%



The cost price of the article ‘F’ is 2.5 times the discount offered on article ‘D’. The sum of the selling price and cost price of article ‘F’ is equal to that of ‘E’. If the discount offered on article ‘F’ is 25% of the sum of the selling price and cost price of article ‘B’, then find the amount by which article ‘F’ is marked up.

a) Rs. 1080.5
b) Rs. 720
c) Rs. 740
d) Rs. 612.5
e) Rs. 662.5

$F(CP) = 660 \times 2.5 = 1650$

$F(CP + SP) = E(SP + CP)$

$F(CP + SP) = 3000$

$F(SP) = 1350$

$F(Disc) = \frac{1}{4} B(SP + CP) = 962.5$

$MP = SP + Disc = 1350 + 962.5 = 2312.5$

The profit earned on article 'D' is Rs. 240. If the discount offered on article D had been Rs. 390 less, then what should be the cost price of the article so that the percentage by which article is marked up above its cost price and the selling price remain the same.

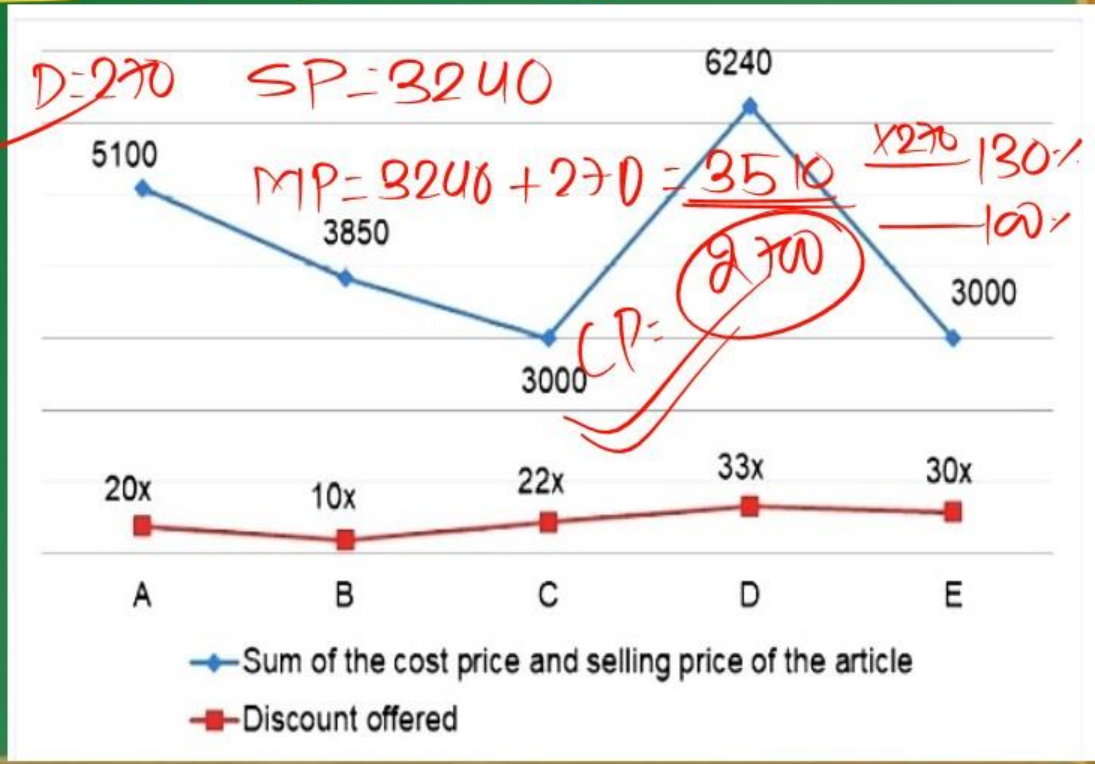
$CP = \frac{6240 - 240}{2} = 3000$ SP = 3240

a) Rs. 2700
b) Rs. 2500
c) Rs. 3100
d) Rs. 2800
e) Rs. 2400

Disc = 660 − 390

MP = 3900

MP $= \frac{900}{3000} = 30\%$



If the article ‘B’ has been marked up by 20% and then same discount is offered on it then the sum of the selling price and cost price decreases by Rs. 90. Find the percentage by which the article was marked up above its cost price originally.

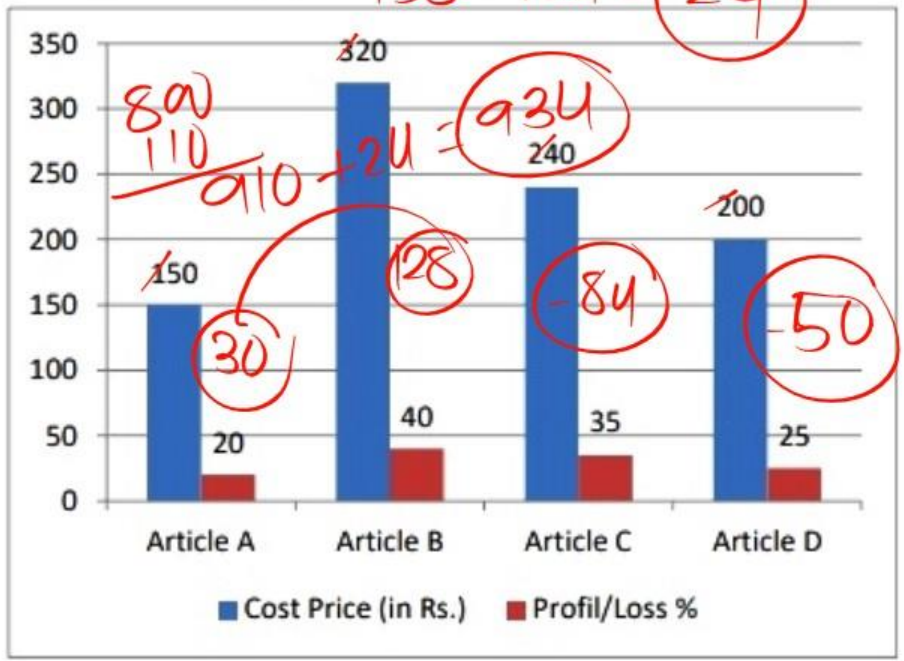
a) 40%
b) 15%
c) 20%
d) 25%
e) 30%

Find the total amount received and the gross profit/loss to the shopkeeper if he has sold article C and D at loss and article A and B at profit.

a) Rs. 886 and 2.56% loss
b) Rs. 934 and 2.63% profit
c) Rs. 846 and 7.03% loss
d) Rs. 974 and 7.03% profit
e) None of these

Directions (18 – 22): Study the following bar graph carefully and answer the following questions.

A shopkeeper sells four articles A, B, C and D. The Bar graph shows the Cost price (In Rs.) of the articles and Profit/loss percentage realized by the shopkeeper while selling these articles.



If 35 units of the article A are sold at loss and 48 units of article C are sold at profit then find the overall profit/ loss percentage.

CP = (35×150) + (48×240) = 16770

SP = (35×120) + (48×324) = 19732

$= \frac{2982}{16770} \times 100$

20% ——— 3354

2% ——— 372

a) 15.09%
b) 18.47%
c) 19.84%
d) 17.78%
e) None of these

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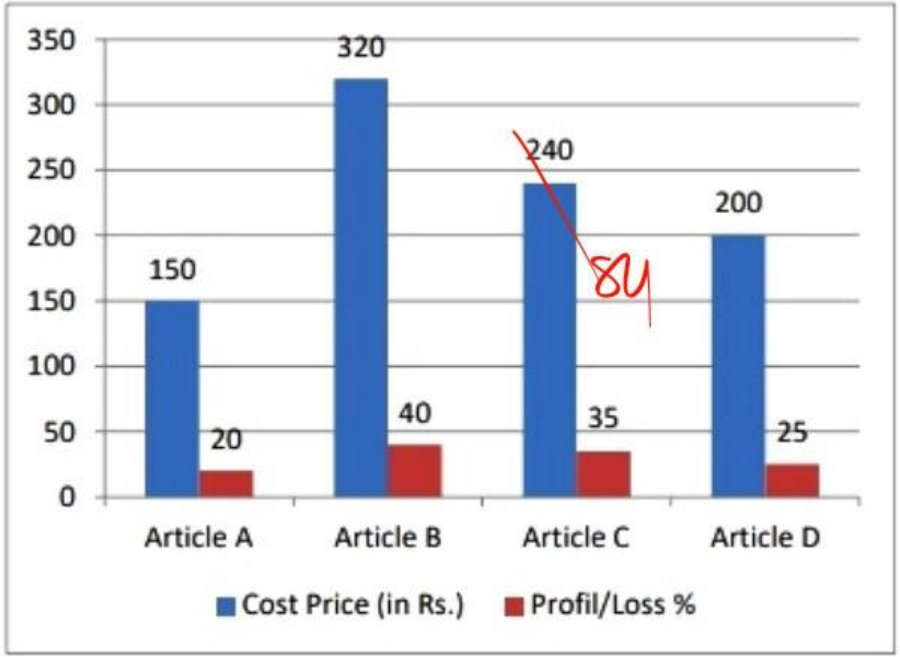

If the selling price of article A is 72% of the selling price of article D then which of the following is correct?

a) A is sold at profit and D is sold at loss.
b) Both A and D are sold at loss.
c) A is sold at loss and D is sold at profit.
d) Both A and D are sold at profit.
e) None of these.

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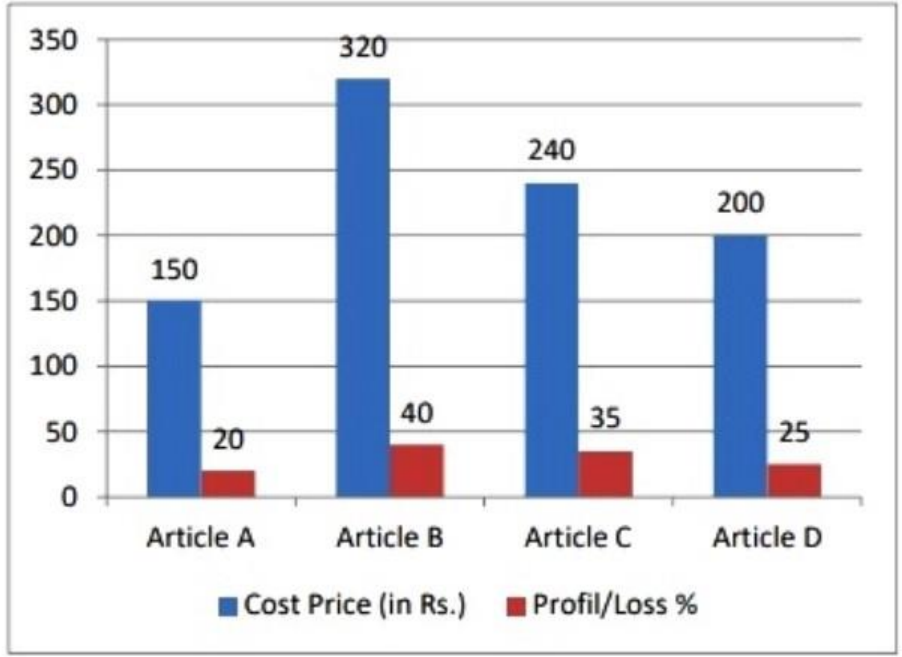

In manufacturing a certain item, 40% of the expenditure is on account of raw materials, 20% on account of labour charges, 20% on account to fixed charges and the rest on miscellaneous. The item is solid at a profit of 25%. The price of the raw materials went up by 15% and the labour charges went up by 20% and the cost on the miscellaneous heads went up by 50% while the fixed costs remained unchanged.

1) If the selling price remained unchanged, then what is the new profit percentage ?

A) 2% B) 4% C) 4 1/6 % D) 10% E) 3 1/3%

2) If the manufacturer wants a 13 7/11 % profit, then by what percentage should he reduce his expenditure on raw materials (at the increased price) as to achieve that target, the selling price remaining the same ?

a)17 17/23 % b)20 14/23% c) 21 17/23% d)24 14/23 % e)22 13/23%