

PROFIT, LOSS AND DISCOUNTS

DRILL – 1 – DISCOUNT AND MARKED PRICE

Cost Price	Marked Price	Selling Price	Discount %	Profit / Loss%
	1800	1530		10% profit
2500		3000	10%	
3500	5600		12%	

DRILL – 2 – AN ARTICLE SOLD AT TWO DIFFERENT SELLING PRICE

$$SP\ 1 / (100 + X) = SP\ 2 / (100 + Y)$$

- If Raju sells a pair of glass for Rs. 48, he makes a loss of 20%. At what price should he sell the glasses to make a profit of 15%
 a. Rs. 56 b. Rs. 72 c. Rs. 67 d. Rs. 69
- A person sells 36 oranges per rupee and suffers a loss of 4%. Find how many oranges per rupee is to be sold to have gain of 8%
 a) 28 b) 32 c) 62 d) 50
- By selling an article for Rs 360, the loss incurred is 10%. At what minimum price should he sell that article to avoid loss?
 (a) 400 Rs (b) 500 Rs (c) 600 Rs (d) 480Rs
- Mr. Kapoor incurs a loss of 40% if he sells his goods at Rs. 2040. What should be his selling price to gain 10% on it.
 a. 3700 b. 3740 c. 3730 d. NOTA
- If I sell a dozen of toys for Rs. 1080, I get a profit of 10%. What should be my selling price to earn a profit of 21%.
 a. 99 b. 95 c. 96 d. NOTA

DRILL – 3 – TWO DIFFERENT ARTICLES SOLD AT SAME SELLING PRICE

- A man sold two articles for Rs. 4800 each. On one he gains 30% and on other he loses 20%. How much does he gain or lose in the whole transaction?
a. 0.95% profit b. 0.95% loss c. 0.98% profit d. 0.98% loss
- Two products were sold at Rs. 850 each. On one, a gain of 15% is made and on the other, a loss of 15%. How much % gain or % loss is made in the whole transaction?
a. 2.5% loss b. 2.5% gain c. 2.25% loss d. 2.25% gain

DRILL – 4 – USE OF FALSE SCALE

$100 + G / 100 + x = \text{True scale} / \text{False scale}$
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- A dishonest shopkeeper professes to sell goods at his cost price but uses a false weight of 950 grams, for each kilogram. Find his gain percentage.
a. 6 5/19% b. 5 5/19% c. 5 18/19% d. 5 8/19%
- A dishonest shopkeeper professes to sell goods at his cost price but uses a false weight of 900 grams, for each kilogram. Find his gain percentage.
a. 10% b. 11.11% c. 12.5% d. NOTA

DRILL 5 - % GAIN OR % LOSS ON WHOLE PROPERTY

% or part of the whole property being sold (A)	% Gain or % Loss incurred by selling (B)	Product (A x B)
X th part or x% of whole or quantity x	% gain = g1 % (say)	X x g1
Y th part or y% of whole or quantity y	% loss = l1 %	-y x l1
Remaining z th part or z % of whole or rest quantity of whole	% gain = g2 %	Z x g2

% gain or % loss on whole property = $\frac{\text{Sum of product of quantity and respective gain or loss\%}}{\text{Amount of whole property}}$

- A trader purchased 180 bags of cements at Rs. 900 per bag. He sold 70 bags at 20% profit and 50 bags at 6% loss. At what rate per bag should the remainder be sold so as to gain 9% on the whole transaction?
a. Rs. 963 b. Rs. 978 c. Rs. 960 d. Rs.980

DRILL – 6 – PERCENTAGE PROFIT = PERCENTAGE LOSS

- The percentage profit earned by selling an article for Rs. 1920 is equal to the percentage loss incurred by selling the same article for Rs. 1280. At what price should the article be sold to make 25% profit?

- a. Rs. 2000 b. Rs. 2200 c. Rs. 2400 d. Data Inadequate

- The percentage profit earned by selling an article for Rs 2480 is equal to the percentage loss incurred by selling the same article for Rs 1980. At what price should the article be sold to make 20 % profit?

- a. Rs. 2540 b. Rs. 2528 c. Rs. 2675 d. NOTA

GOOGLY QUESTIONS

1. By selling 33 metres of cloth, a person gains the selling price of 11 metres. Find the gain %

Solution:

Gain % is

$$(11/33) \times 100 = 33.33\%$$



2. If a manufacturer gains 10%, the wholesale dealer 15% and the retailer 25%, find the cost of a production of a table, the retail price of which is Rs.1265

Solution:

$$\text{Total gain} = 10 + 15 + 25 = 50\%$$

$$\text{Gain \%} = 50\%$$

$$\text{Sp} = 1265$$

$$\text{CP} = 843.33$$



3. What is the equivalent discount of the 20%, 10%, 5% discount series

Solution :

$$\text{Equivalent discount is } 20 + 10 + 5 = 35\%$$



PRACTICE QUESTIONS

1. A man sells a book at a profit of 20%. If he had bought it at 20% less and sold it for Rs 18 less, he would have gained 25%. Find the cost price of the book?

- a) 45 Rs b) 200 Rs c) 90 Rs d) 250 Rs

2. A shop keeper earns a profit of 12% on selling a book at 10% discount on the printed price. The ratio of the CP and the printed price of the book is

- a) 45:56 b) 50:61 c) 99:125 d) 36:79

3. An article when sold for Rs 200 fetches 25% profit. What could be the percentage profit/loss if 6 such articles are sold for Rs 1056?

- a) 10% loss b) 10% profit (c) 5% loss (d) 5% profit

4. If the cost price of 15 balls is equal to the selling price of 12 balls, Find the gain percent?

- (a) 50% (b) 25% (c) 75% (d) 30%

5. A man buys 200 oranges for Rs 10. How many oranges for a rupee can he sell so that his profit percentage is 25%?

- (a) 10 (b) 16 (c) 15 (d) 20

6. If selling price is doubled, the profit triples. Find the profit percent.
a. $66\frac{2}{3}$ b. 100 c. $105\frac{1}{3}$ d. 120
7. 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. 55 d. Rs. 60
8. A trader mixes 26 kg of rice at Rs. 20 per kg with 30 kg of rice of other variety at Rs. 36 per kg and sells the mixture at Rs. 30 per kg. His profit percent is:
a. No profit, No loss b. 5% c. 8% d. 10%
9. A grocer gives only 900 g of cabbage for 1 kg of cabbage by using faulty weighing scale. What is the percentage gain of the grocer in the deal?
a. 10% b. 11% c. 1.01% d. 12%
10. A man buys 2 cycles for a total cost of Rs. 900. By selling one for $\frac{4}{5}$ th of its cost and other for $\frac{5}{4}$ th of its cost, he makes a profit of Rs. 90 on the whole transaction. Find the cost of lower priced cycle.
a. Rs. 360 b. Rs. 250 c. Rs. 300 d. Rs. 420