Alfred buys an old scooter for Rs. 4700 and spends Rs. 800 on its repairs. If he sells the scooter for Rs. 5800, his gain percent is:

A.  $4 \frac{4}{7}\%$ B.  $5 \frac{5}{11}\%$ C. 10% D. 12% Answer: Option B Explanation: Cost Price (C.P.) = Rs. (4700 + 800) = Rs. 5500. Selling Price (S.P.) = Rs. 5800. Gain = (S.P.) - (C.P.) = Rs.(5800 - 5500) = Rs. 300. Gain % =  $\left(\frac{300}{5500} \times 100\right)_{\%} = 5\frac{5}{11}\%$ 

2. The cost price of 20 articles is the same as the selling price of x articles. If the profit is 25%, then the value of x is:

<u>C.</u> 18

<u>D.</u> 25

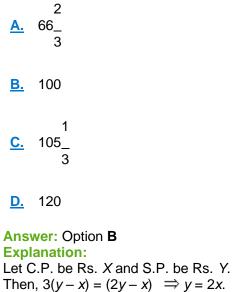
Answer: Option B Explanation: Let C.P. of each article be Re. 1 C.P. of x articles = Rs. x. S.P. of x articles = Rs. 20. Profit = Rs. (20 - x).

$$\therefore \left[ \underbrace{- x}_{x} \times 100 = 25 \right]$$

 $\Rightarrow 2000 - 100x = 25x$ 125x = 2000

 $\Rightarrow x = 16.$ 

3.If selling price is doubled, the profit triples. Find the profit percent.



Let C.P. be Rs. X and S.P. be Rs. Y. Then,  $3(y-x) = (2y-x) \implies y = 2x$ . Profit = Rs. (y-x) = Rs. (2x-x) = Rs. X.  $\therefore$  Profit % =  $\begin{pmatrix} x \\ -x & 100 \\ x \end{pmatrix}_{\%} = 100\%$ 

- 4. A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?
  - <u>A.</u> 3
  - <u>B.</u> 4
  - <u>C.</u> 5
  - <u>D.</u> 6

Answer: Option C Explanation:

C.P. of 6 toffees = Re. 1

S.P. of 6 toffees = 120% of Re. 1 = Rs. 
$$\frac{6}{5}$$
  
For Rs.  $\frac{6}{5}$ , toffees sold = 6.  
For Re. 1, toffees sold =  $\left(6 \times \frac{5}{6}\right) = 5$ .