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:

A. 15

B. 16

C. 18

D. 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*).

$\therefore \left(\frac{20 - x}{x} \times 100 = 25\right)$

$\Rightarrow 2000 - 100x = 25x$

$125x = 2000$

$\Rightarrow x = 16$.

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

A. $66\frac{2}{3}$

B. 100

C. $105\frac{1}{3}$

D. 120

Answer: Option **B**
Explanation:
Let C.P. be Rs. X and S.P. be Rs. Y.
Then, $3(y - x) = (2y - x) \Rightarrow y = 2x$.
Profit = Rs. $(y - x)$ = Rs. $(2x - x)$ = Rs. X.

$\therefore$ Profit % = $\left(\frac{x}{x} \times 100\right)$ % = 100%

4. A vendor bought toffees at 6 for a rupee. How many for a rupee must he sell to gain 20%?

A. 3

B. 4

C. 5

D. 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.