Exercise 9A

Q1

Answer :

$(i)\ 48\%$

$$= \frac{48}{100}$$

$$= \frac{12}{25}$$

$(ii)\ 220\%$

$$= \frac{220}{100}$$

$$= \frac{11}{5}$$

$(iii)\ 2.5\%$

$$= \frac{2.5}{100}$$

$$= \frac{25}{1000}$$

$$= \frac{1}{40}$$

Q2

Answer :

$(i)\ \ 6\% = \frac{6}{100} = 0.06$

$(ii)\ \ 72\% = \frac{72}{100} = 0.72$

$(iii)\ \ 125\% = \frac{125}{100} = 1.25$

Q3

Answer :

(i) $\frac{9}{25}$

$= \left(\frac{9}{25} \times 100\right)\%$

$= \left(9 \times 4\right)\%$

$= 36\%$

(ii) $\frac{3}{125}$

$= \left(\frac{3}{125} \times 100\right)\%$

$= 2.4\%$

(iii) $\frac{12}{5}$

$= \left(\frac{12}{5} \times 100\right)\%$

$= 240\%$

Q4

Answer :

$4 : 5 = \frac{4}{5} = \left(\frac{4}{5} \times 100\right)\%$

$= 80\%$

Q5

Answer :

125%
$= \frac{125}{100}$
$= \frac{5}{4} \ = 5:4$

Q6

Answer :

We have :
$6\frac{2}{3}\% = \frac{20}{3}\%$
$= \left(\frac{20}{3} \times \frac{1}{100}\right)$
$= \frac{1}{15}$
$= 0.06$
Also, $\frac{3}{20} = 0.15$
The third number is 0.14.
Clearly, 0.15 **is the largest.**
Hence, $\frac{3}{20}$ **is the largest.**

Q7

Answer :

(i) Required percentage $= \left(\frac{96}{150} \times 100\right)\% = 64\%$

(ii) Required percentage $= \left(\frac{200}{5 \times 1000} \times 100\right)\% = 4\%$

(iii) Required percentage $= \left(\frac{250}{2\times1000} \times 100\right)\% = 12.5\%$

Q8

Answer :

$4\frac{1}{2}\% = \frac{9}{2\times100}$

$\therefore \frac{9}{200}$ of Rs $3600 = \frac{9}{200} \times 3600 =$ Rs 162

Q9

Answer :

Let the number be x.

16% of x is 72.

$\Rightarrow \frac{16}{100} \times x = 72$

$\Rightarrow 16x = 72 \times 100$

$\Rightarrow 16x = 7200$

$\Rightarrow x = \frac{7200}{16} = 450$

$\therefore$ The required number is 450.

Q10

Answer :

Let Rs x be his monthly income.

His savings $= 18\%$ of Rs x

$= \text{Rs } \left(x \times \frac{18}{100}\right)$

$= \text{Rs } \frac{9x}{50}$

Now, $\frac{9x}{50} = 1890$

$\Rightarrow x = \text{Rs } \left(1890 \times \frac{50}{9}\right)$

$\Rightarrow x = \text{Rs } 10500$

$\therefore$ His monthly income is Rs. 10500.

Q11

Answer :

Let x be the total number of games played.

Percentage of games won $= 35\%$ of x

$$= \left(x \times \frac{35}{100}\right)$$

$$= \frac{35x}{100}$$

Now, $\frac{35x}{100} = 7$

$$\Rightarrow x = \left(7 \times \frac{100}{35}\right)$$

$$\Rightarrow x = 20$$

$\therefore$ The total number games played is 20.

Q12

Answer :

Let $Rs\ x$ be Amit 's old salary.

His salary after increment will be Rs $\left(x + \frac{20}{100}\,x\right)$

According to the question, we have :

$$\Rightarrow x + \frac{20}{100}\,x = 15300$$

$$\Rightarrow \frac{100x + 20x}{100} = 15300 \qquad (\text{LCM} = 100)$$

$$\Rightarrow \frac{120x}{100} = 15300$$

$$\Rightarrow 120x = 15300 \times 100$$

$$\Rightarrow x = \frac{15300 \times 100}{120}$$

$$\Rightarrow x = 12750$$

$\therefore$ The old salary is Rs $12,750$.

********** END **********