

Exercise 9B

Q1.

Answer:

(d) 60%

$$\frac{3}{5} = \left(\frac{3}{5} \times 100\right)\% = 60\%$$

Q2.



Q3.

Answer:

(c) 120%

$$6:5 = \frac{6}{5}$$

 $= \left(\frac{6}{5} \times 100\right)\%$
 $= 120\%$

Q4.

Answer:

(d) 180

Let x be the required number. Then, we have:

$$5\% \text{ of } \mathbf{x} = 9$$

$$\Rightarrow \left(\mathbf{x} \times \frac{5}{100}\right) = 9$$

$$\Rightarrow \frac{5\mathbf{x}}{100} = 9$$

$$\Rightarrow \mathbf{x} = \left(9 \times \frac{100}{5}\right)$$

$$\Rightarrow \mathbf{x} = 180$$

Q5.

Answer:

(c)
$$133\frac{1}{3}\%$$

Required percentage = $\left(\frac{120}{90} \times 100\right)\%$
= $133\frac{1}{3}\%$

Q6.

Answer:

(d) 2.5%

Required percentage =
$$\left(\frac{250}{(10\times1000)}\times100\right)\% = 2.5\%$$

Q7

Answer:

(b) 600

Let the required number be x. Then, we have:

$$40\% \ of \ x = 240$$

$$\Rightarrow \left(x \times \frac{40}{100}\right) = 240$$

$$\Rightarrow \frac{40\mathbf{z}}{100} = 240$$

$$\Rightarrow x = \left(240 \times \frac{100}{40}\right)$$

$$\Rightarrow x = 600$$

Q8

Answer:

(c) 15

Let the required number be x. Then, we have:

$$x\% \ of \ 400 = 60$$

$$\Rightarrow \left(400 \times \frac{x}{100}\right) = 60$$

$$\Rightarrow \frac{400x}{100} = 60$$

$$\Rightarrow 4x = 60$$

$$\Rightarrow x = \frac{60}{4}$$

$$\Rightarrow x = 15$$

Q9

Answer:

(d) 560

Let the required number be x. Then, we have:

$$(180\% \ of \ x) \div 2 = 504$$

$$\Rightarrow \left(x \times \frac{180}{100}\right) \div 2 = 504$$

$$\Rightarrow \left(\frac{180x}{100}\right) \div 2 = 504$$

$$\Rightarrow \left(\frac{180x}{100} \times \frac{1}{2}\right) = 504$$

$$\Rightarrow \frac{9x}{10} = 504$$

$$\Rightarrow x = \left(504 \times \frac{10}{9}\right)$$

$$\Rightarrow x = 560$$

Q10

Answer:

(a) Rs 160
20 % of Rs
$$800 = Rs$$
 $\left(800 \times \frac{20}{100}\right)$
= Rs 160

Q11

Answer:

(c) 175

Let the maximum marks be x. Then, we have:

$$56\% \text{ of } x = \left(x \times \frac{56}{100}\right)$$

$$= \frac{56x}{100}$$
Now, $\frac{56x}{100} = 98$

$$\Rightarrow x = \left(98 \times \frac{100}{56}\right)$$

$$\Rightarrow x = 175$$