



### Exercise 9C

Q1

**Answer :**

Let the required number be  $x$ .

According to the question:

$$9 + x = 36$$

$$\text{or, } x + 9 - 9 = 36 - 9 \quad \text{[Subtracting 9 from both the sides]}$$

$$\text{or, } x = 27$$

Thus, the required number is 27.

Q2

**Answer :**

Let the required number be  $x$ .

According to the question:

$$4x - 11 = 89$$

$$\text{or, } 4x - 11 + 11 = 89 + 11 \quad \text{[Adding 11 on both the sides]}$$

$$\text{or, } 4x = 100$$

$$\text{or, } 4x4 = 1004 \quad \text{[Dividing both the sides by 4]}$$

$$\text{or, } x = 25$$

Thus, the required number is 25.

Q3

**Answer :**

Let the required number be x.

According to the question:

$$\text{or, } 5x = x + 80$$

$$\text{or, } 5x - x = 80 \quad [\text{Transposing } x \text{ to the L.H.S.}]$$

$$\text{or, } 4x = 80$$

$$\text{or, } \frac{4x}{4} = \frac{80}{4} \quad [\text{Dividing both the sides by 4}]$$

$$\text{or, } x = 20$$

Thus, the required number is 20.

Q4

**Answer :**

Let the three consecutive natural numbers be x, (x+1), (x+2).

According to the question:

$$x + (x + 1) + (x + 2) = 114$$

$$\text{or, } x + x + 1 + x + 2 = 114$$

$$\text{or, } 3x + 3 = 114$$

$$\text{or, } 3x + 3 - 3 = 114 - 3 \quad [\text{Subtracting 3 from both the sides}]$$

$$\text{or, } 3x = 111$$

$$\text{or, } \frac{3x}{3} = \frac{111}{3} \quad [\text{Dividing both the sides by 3}]$$

$$\text{or, } x = 37$$

Required numbers are:

$$x = 37$$

$$\text{or, } x + 1 = 37 + 1 = 38$$

$$\text{or, } x + 2 = 37 + 2 = 39$$

Thus, the required numbers are 37, 38 and 39.

Q5

**Answer :**

Let the required number be x.

When Raju multiplies it with 17, the number becomes 17x.

According to the question :

$$17x + 4 = 225$$

$$\text{or, } 17x + 4 - 4 = 225 - 4 \quad [\text{Subtracting 4 from both the sides}]$$

$$\text{or, } 17x = 221$$

$$\text{or, } \frac{17x}{17} = \frac{221}{17} \quad [\text{Dividing both the sides by 17}]$$

$$\text{or, } x = 13$$

Thus, the required number is 13.

Q6

**Answer :**

Let the required number be x.

According to the question, the number is tripled and 5 is added to it

$$\therefore 3x + 5$$

$$\text{or, } 3x + 5 = 50$$

$$\text{or, } 3x + 5 - 5 = 50 - 5 \quad [\text{Subtracting 5 from both the sides}]$$

$$\text{or, } 3x = 45$$

$$\text{or, } \frac{3x}{3} = \frac{45}{3} \quad [\text{Dividing both the sides by 3}]$$

$$\text{or, } x = 15$$

Thus, the required number is 15.

Q7

**Answer :**

Let one of the number be x.

$$\therefore \text{The other number} = (x + 18)$$

According to the question:

$$x + (x + 18) = 92$$

$$\text{or, } 2x + 18 - 18 = 92 - 18 \quad [\text{Subtracting 18 from both the sides}]$$

$$\text{or, } 2x = 74$$

$$\text{or, } \frac{2x}{2} = \frac{74}{2} \quad [\text{Dividing both the sides by 2}]$$

$$\text{or, } x = 37$$

Required numbers are:

$$x = \mathbf{37}$$

$$\text{or, } x + 18 = 37 + 18 = \mathbf{55}$$

Q8

**Answer :**

Let one of the number be 'x'

$$\therefore \text{Second number} = 3x$$

According to the question:

$$x + 3x = 124$$

$$\text{or, } 4x = 124$$

$$\text{or, } \frac{4x}{4} = \frac{124}{4} \quad [\text{Dividing both the sides by 4}]$$

$$\text{or, } x = 31$$

Thus, the required number is  $x = \mathbf{31}$  and  $3x = 3 \times 31 = \mathbf{93}$ .

Q9

**Answer :**

Let one of the number be  $x$ .

$\therefore$  Second number =  $5x$

According to the question:

$$5x - x = 132$$

$$\text{or, } 4x = 132$$

$$\text{or, } \frac{4x}{4} = \frac{132}{4} \quad [\text{Dividing both the sides by 4}]$$

$$\text{or, } x = 33$$

Thus, the required numbers are  $x = 33$  and  $5x = 5 \times 33 = 165$ .

Q10

**Answer :**

Let one of the even number be  $x$ .

Then, the other consecutive even number is  $(x + 2)$ .

According to the question:

$$x + (x + 2) = 74$$

$$\text{or, } 2x + 2 = 74$$

$$\text{or, } 2x + 2 - 2 = 74 - 2 \quad [\text{Subtracting 2 from both the sides}]$$

$$\text{or, } 2x = 72$$

$$\text{or, } \frac{2x}{2} = \frac{72}{2} \quad [\text{Dividing both the sides by 2}]$$

$$\text{or, } x = 36$$

Thus, the required numbers are  $x = 36$  and  $x + 2 = 38$ .

Q11

**Answer :**

Let the first odd number be  $x$ .

Then, the next consecutive odd numbers will be  $(x + 2)$  and  $(x + 4)$ .

According to the question:

$$x + (x + 2) + (x + 4) = 21$$

$$\text{or, } 3x + 6 = 21$$

$$\text{or, } 3x + 6 - 6 = 21 - 6 \quad [\text{Subtracting 6 from both the sides}]$$

$$\text{or, } 3x = 15$$

$$\text{or, } \frac{3x}{3} = \frac{15}{3} \quad [\text{Dividing both the sides by 3}]$$

$$\text{or, } x = 5$$

$\therefore$  Required numbers are:

$$x = 5$$

$$x + 2 = 5 + 2 = 7$$

$$x + 4 = 5 + 4 = 9$$

\*\*\*\*\* END \*\*\*\*\*