Exercise 9C

Q1

Answer :

Let the required number be x.
According to the question:
$9 + x = 36$
or, $x + 9 - 9 = 36 - 9$ [Subtracting 9 from both the sides]
or, $x = 27$
Thus, the required number is 27.

Q2

Answer :

Let the required number be x.
According to the question:
$4x - 11 = 89$
or, $4x - 11 + 11 = 89 + 11$ [Adding 11 on both the sides]
or, $4x = 100$
or, $4x4 = 1004$ [Dividing both the sides by 4]
or, $x = 25$
Thus, the required number is 25.

Q3

Answer :

Let the required number be x.

According to the question:

or, $5x = x + 80$

or, $5x - x = 80$ [Transposing x to the L.H.S.]

or, $4x = 80$

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

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:

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

or, $x + x + 1 + x + 2 = 114$

or, $3x + 3 = 114$

or, $3x + 3 - 3 = 114 - 3$ [Subtracting 3 from both the sides]

or, $3x = 111$

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

or, $x = 37$

Required numbers are:

$x = 37$

or, $x + 1 = 37 + 1 = 38$

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 :

$17x + 4 = 225$

or, $17x + 4 - 4 = 225 - 4$ [Subtracting 4 from both the sides]

or, $17x = 221$

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

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

∴ 3x + 5

or, 3x + 5 = 50

or, 3x + 5 − 5 = 50 − 5   [Subtracting 5 from both the sides]

or, 3x = 45

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

or, x = 15

Thus, the required number is 15.

Q7

Answer :

Let one of the number be x.

∴ The other number = (x + 18)

According to the question:

x + (x + 18) = 92

or, 2x + 18 − 18 = 92 − 18   [Subtracting 18 from both the sides]

or, 2x =74

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

or, x = 37

Required numbers are:

x = **37**

or, x + 18 = 37 + 18 = **55**

Q8

Answer :

Let one of the number be 'x'

∴ Second number = 3x

According to the question:

x + 3x = 124

or, 4x = 124

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

or, x = 31

Thus, the required number is x = **31** and 3x = 3×31 = **93**.

Q9

Answer :

Let one of the number be x.

∴ Second number = 5x

According to the question:

5x − x = 132

or, 4x = 132

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

or, x = 33

Thus, the required numbers are x = **33** and 5x = 5×33 = **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

or, 2x + 2 = 74

or, 2x + 2 − 2 = 74 − 2   [Subtracting 2 from both the sides]

or, 2x = 72

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

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

or, 3x + 6 = 21

or, 3x + 6 − 6 = 21 − 6   [Subtracting 6 from both the sides]

or, 3x = 15

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

or, x = 5

∴ Required numbers are:

x = **5**

x + 2 = 5 + 2 = **7**

x + 4 = 5 + 4 = **9**

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