

$\therefore$ Other number $= 50 \times \frac{2}{5} = 20$

Hence, the numbers are 50 and 20.

Q10

**Answer :**

Let the number be $x$.

Then, we have:

$\frac{2}{3}x = \frac{1}{3}x + 3$

$\Rightarrow \frac{1}{3}x = \frac{2x}{3} - 3$

$\Rightarrow \frac{x}{3} - \frac{2x}{3} = -3$

$\Rightarrow \frac{x-2x}{3} = -3$

$\Rightarrow x - 2x = 3 \times (-3)$

$\Rightarrow -x = -9$

$\therefore$ The required number is 9.

Q11

**Answer :**

Let the number be $x$.

Then, we have:

$\Rightarrow \frac{x}{5} + 5 = \frac{x}{4} - 5$

$\Rightarrow \frac{x}{5} - \frac{x}{4} = -5 - 5$

$\Rightarrow \frac{-x}{20} = -10$

$\Rightarrow x = 200$

$\therefore$ The required number is 200.

Q12

**Answer :**

Let the two consecutive natural number be $x$ and $(x+1)$.
Then, we have:
$x+(x+1)=63$
$\Rightarrow x+x+1=63$
$\Rightarrow 2x=63-1$
$\Rightarrow x=\frac{\cancel{6}\,\cancel{2}^{31}}{\cancel{2}_{1}}$
$\Rightarrow x=31$
$\therefore$ The required numbers are 31 and 32 (i.e., 31+1).

Q13

**Answer :**

Let the two consecutive odd integers whose sum is 76 be $x$ and $(x+2)$.
Then, $x+x+2=76$
$\Rightarrow 2x+2=76$
$\Rightarrow 2x=76-2$
$\Rightarrow x=74\div 2$
$\Rightarrow x=37$
$\therefore$ The required integers are 37 and 39 $(i.e.,\ 37+2)$.

Q14

**Answer :**

Let the three consecutive positive even integers be $x$, $(x+2)$ and $(x+4)$.
Let $x$ be the even number.
Then, $x+x+2+x+4=90$
$\Rightarrow 3x=90-6$
$\Rightarrow 3x=84$

$\Rightarrow x = \frac{84}{3} = 28$

$\therefore$ The required numbers are 28, 30 and 32.

Q15

**Answer :**

Let the two parts be $x$ and $(184 - x)$.

Then, we have:

$\frac{1}{3}x = \frac{1}{7}\left(184 - \mathrm{x}\right)+8$

$\Rightarrow \frac{1}{3}x - \frac{1}{7}\left(184 - \mathrm{x}\right) = 8$

$\Rightarrow \frac{1}{3}x - \frac{184}{7} + \frac{x}{7} = 8$

$\Rightarrow \frac{1}{3}x + \frac{1}{7}x = \frac{184}{7} + 8$

$\Rightarrow \frac{7x+3x}{21} = 8 + \frac{184}{7}$

$\Rightarrow \frac{10x}{21} = \frac{56+184}{7}$

$\Rightarrow \frac{10x}{21} = \frac{240}{7}$

$\Rightarrow x = \frac{240\times21}{7\times10}$

$= 72$

Now, other part $= 184 - 72 = 112$

$\therefore$ The two parts are 72 and 112.

Q16

**Answer :**

Let the number of five rupee notes be $x$.

Then, the number of ten rupee notes will be $(90 - x)$.

According to the question, we have :

$5x + 10(90 - x) = 500$

$\Rightarrow 5x + 900 - 10x = 500$
$\Rightarrow \ -5x = -400$
$\Rightarrow x = 80$
Number of ten rupee notes $= 90 - 80 = 10$
$\therefore$ There are 80 five rupee notes and 10 ten rupee notes.

Q17

**Answer :**

Let the numbers of 50 paise coins and 25 paise coins be $x$ and $2x$, respectively.
Then, we have :
$50x + 25 \times 2x = 3400$
$\Rightarrow 50x + 50x = 3400$
$\Rightarrow 100x = 3400$
$\Rightarrow x = 34$
$\therefore$ Number of 50 paise coins $= 34$
and number of 25 paise coins $= 68$

Q18

**Answer :**

Let the present ages of Raju and his cousin be $(x\text{-}19)$ yrs and $x$ yrs.
According to the question, we have :
$\frac{(x-19)+5}{x+5} = \frac{2}{3}$
$\Rightarrow 3(x - 14) = 2x + 10$
$\Rightarrow 3x - 42 = 2x + 10$
$\Rightarrow x = 52$
$\therefore$ Age of Raju's cousin $= 52$ yrs
and age of Raju $= 52 - 19 = 33$ yrs

Q19

**Answer :**

Let the age of the son and the father be $x$ yrs and $(x + 30)$ yrs, respectively.
According to the question, we have :
$3 \times (x + 12) = x + 30 + 12$
$\Rightarrow 3x + 36 = x + 42$
$\Rightarrow 3x - x = 42 - 36$
$\Rightarrow 2x = 6$
$\Rightarrow x = 3$
$\therefore$ Son's age $= 3$ yrs
Father's age $= (x + 30)$ yrs $= (3 + 30)$ yrs $= 33$ yrs

Q20

**Answer :**

Given ratio of Sonal's and Manoj's ages $= 7 : 5$
Let the ages of Sonal and Manoj be $7x$ yrs and $5x$ yrs.
According to the question, we have :
$\frac{7x+10}{5x+10} = \frac{9}{7}$
$\Rightarrow 7(7x + 10) = 9(5x + 10)$
$\Rightarrow 49x + 70 = 45x + 90$
$\Rightarrow 49x - 45x = 90 - 70$
$\Rightarrow 4x = 20$
$\Rightarrow x = 5$
$\therefore$ Sonal's present age is $7 \times 5$=35 yrs
Manoj's present age is $5 \times 5$=25 yrs

Q21

**Answer :**

Let $x$ yrs be the present age of son.
Then, the age of the son 5 years ago would be $(x - 5)$ $yrs$

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