

2/12/20
class-VII

class-(VII)

Subject:- Math.

Ex = 7B. page = 114

1. Let, the required number = x
According to the question.

$$2x - 7 = 45$$

$$\Rightarrow 2x = 45 + 7$$

$$\Rightarrow 2x = 52$$

$$\Rightarrow x = \frac{52}{2}$$

$$\therefore x = 26 \quad \text{Ans //}$$

5. Let, the number be x .
A.T.Q (According to the question)

$$x + x \times \frac{2}{3} = \del{52} 55$$

$$\Rightarrow x + \frac{2x}{3} = 55$$

$$\Rightarrow \frac{3x + 2x}{3} = 55$$

$$\Rightarrow x = \frac{55 \times 3}{5}$$

$$\therefore x = 33 \quad \text{Ans //}$$

8. Let, The required number be x .

A.T.Q.

$$\left(\frac{2}{3} \right) \times x < \text{original number} = 20$$

$$\Rightarrow \text{original number} - \frac{2x}{3} = 20$$

$$\Rightarrow x - \frac{2x}{3} = 20$$

$$\Rightarrow \frac{3x - 2x}{3} = 20$$

$$\Rightarrow x = 20 \times 3$$

$$\therefore x = 60 \quad \text{Ans //}$$

12. Let, The two consecutive number be x and $(x+1)$

A.T.Q Their sum is 63

$$\Rightarrow x + (x+1) = 63$$

$$\Rightarrow x + x + 1 = 63$$

$$\Rightarrow 2x + 1 = 63$$

$$\Rightarrow 2x = 63 - 1$$

$$\Rightarrow 2x = 62$$

$$\therefore x = 31 \quad \text{Ans.}$$

\(\therefore\) Therefore, the two consecutive numbers are, 31, 31+1

$$= 31 \text{ and } 32 \quad \parallel$$

16.

Let, Rs 5 number of notes be x

\(\therefore\) Rs 10 number of notes be $(90 - x)$

A.T.O.

Their sum of amount is Rs 500

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

$$\Rightarrow 5x + 900 - 10x = 500$$

$$\Rightarrow -5x = 500 - 900$$

$$\Rightarrow -5x = -400$$

$$\Rightarrow x = \frac{400}{5}$$

$$\therefore x = 80 \quad \parallel$$

Therefore, Rs 5 number of notes 80

and Rs 10 number of notes $(90 - 80)$

$$= 10$$

Ans

Cousin be x years.
∴ Raju Age be $(x+19)$

After 5 years,

$$\text{Cousin Age} = (x+5)$$

$$\text{and Raju Age} = (x+19)+5$$

$$= x+19+5$$

$$= \cancel{(x+14)} = x+24$$

A.T.Q.
After 5 years their Age Ratio 2:3

$$\Rightarrow \frac{x+5}{x+24} = \frac{2}{3}$$

$$\Rightarrow 3x+15 = 2x+48$$

$$\Rightarrow 3x - 2x = 48 - 15$$

$$\Rightarrow x = 33 //$$

∴ therefore; there are present
age 33 and $33+19 = 52 //$

24.

$$\text{Tens} + \text{Ones} = 8$$

Let, (ones place digit) be x .

\therefore Ten place digit be $(8-x)$.

\therefore Original number

$$\begin{aligned} &= x \times 1 + 10(8-x) \\ &= x + 80 - 10x \\ &= 80 - 9x // \end{aligned}$$

\therefore Reversed number =

$$\begin{aligned} &x \times 10 + 1(8-x) \\ &= 10x + 8 - x \\ &= 9x + 8 // \end{aligned}$$

A.T.O.

$$18 + (80 - 9x) = 9x + 8$$

$$\Rightarrow 18 + 80 - 9x = 9x + 8$$

$$\Rightarrow 98 - 9x - 9x = 8$$

$$\Rightarrow -18x = 8 - 98$$

$$\Rightarrow -18x = -90$$

$$\Rightarrow x = \frac{90}{18} = 5 \quad \therefore x = 5$$

∴ original number

$$2A + 3A = 8A$$

$$80 - 9x$$

$$\geq 80 - 9 \times 5 \quad [\because x = 5]$$

$$\geq 80 - 45$$

$$\geq 35 \quad \text{Ans}$$

25. Let, A chair cost be $Rs\ x$.

∴ A table cost be $Rs(x + 75)$.

A.T.Q.

The total cost of 3 tables and 2 chairs is $Rs\ 1850$.

$$\Rightarrow 3(x + 75) + 2x = 1850$$

$$\Rightarrow 3x + 225 + 2x = 1850$$

$$\Rightarrow 5x = 1850 - 225$$

$$\Rightarrow 5x = 1625$$

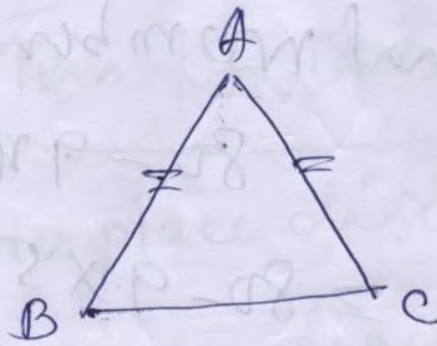
$$\Rightarrow x = \frac{1625}{5} = 325$$

$$\Rightarrow x = 325$$

Ans: A chair cost is 325

and A table cost is $(325 + 75) = Rs\ 400$

28.



$$AB = AC \neq BC$$

Let, Third side (BC) be x unit.

∴ Equal sides length
 $= (2x - 5)$ unit.

A.T.Q

perimeter is 55

$$\Rightarrow AB + AC + BC = 55$$

$$\Rightarrow (2x - 5) + (2x - 5) + x = 55$$

$$\Rightarrow 2x - 5 + 2x - 5 + x = 55$$

$$\Rightarrow 5x = 55 + 10$$

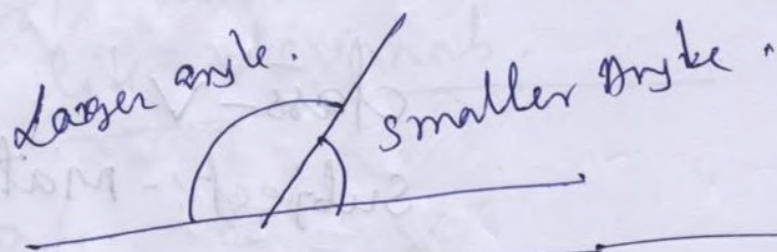
$$\Rightarrow x = \frac{65}{5}$$

$$\therefore x = 13 \text{ m //}$$

Therefore, Equal side $= 2x - 5$
 $= 2 \times 13 - 5$
 $= 26 - 5 = 21 \text{ m,,}$

21m, 21m and 13m //

30,



we know that,

The sum of the angles
in a supplementary is 180° .

$$\Rightarrow \text{larger angle} + \text{smaller angle} = 180^\circ$$

Let, larger angle be x°
 \therefore smaller angle be $(180 - x)^\circ$

A.T.Q.

Their difference is 44

$$\Rightarrow x^\circ - (180 - x)^\circ = 44$$

$$\Rightarrow x - 180 + x = 44$$

$$\Rightarrow 2x = 44 + 180$$

$$\Rightarrow 2x = 224$$

$$\Rightarrow x = 112 //$$

$$\Rightarrow x = 112 //$$

Therefore; 112° and 68° //

Ans Ex 27B (1 to 30) All.

$$\frac{180}{2} = 90$$
$$\frac{112}{2} = 56$$
$$\frac{68}{2} = 34$$