



VIDYA BHAWAN, BALIKA VIDYAPITH

Shakti Utthan Ashram, Lakhisarai-811311(Bihar)

(Affiliated to CBSE up to +2 Level)

CLASS:VII

SUB.: MATHS

DATE: 25 -05-2021

Simple Equation

1. Set up equations and solve them to find the unknown numbers in the following cases:

(a) Add 4 to eight times a number; you get 60.

Solution: - Let us assume the required number be x

Eight times a number = $8x$

The given above statement can be written in the equation form as,

$$= 8x + 4 = 60$$

By transposing 4 from LHS to RHS it becomes - 4

$$= 8x = 60 - 4$$

$$= 8x = 56$$

Divide both side by 8,

Then we get,

$$= (8x/8) = 56/8$$

$$= x = 7$$

Do Your Self

(b) One-fifth of a number minus 4 gives 3.

(c) If I take three-fourths of a number and add 3 to it, I get 21.

(d) When I subtracted 11 from twice a number, the result was 15.

(e) Munna subtracts thrice the number of notebooks he has from 50, he finds the result to be 8.

(f) Ibenhal thinks of a number. If she adds 19 to it and divides the sum by 5, she will get 8.

(g) Anwar thinks of a number. If he takes away 7 from $5/2$ of the number, the result is 23.

2. Solve the following:

(a) The teacher tells the class that the highest marks obtained by a student in her class is twice the lowest marks plus 7. The highest score is 87. What is the lowest score?

Solution: - Let us assume the lowest score be x

From the question it is given that,

The highest score is = 87

Highest marks obtained by a student in her class is twice the lowest marks plus 7 = $2x + 7$

$5/2$ of the number = $(5/2)x$

The given above statement can be written in the equation form as,

Then, $= 2x + 7 = \text{Highest score}$

$$= 2x + 7 = 87$$

By transposing 7 from LHS to RHS it becomes -7

$$= 2x = 87 - 7$$

$$= 2x = 80$$

Now, Divide both the side by 2

$$= 2x/2 = 80/2$$

$$= x = 40$$

Hence, the lowest score is 40

Do Your Self

(b) In an isosceles triangle, the base angles are equal. The vertex angle is 40° . What are the base angles of the triangle?

(c) Sachin scored twice as many runs as Rahul. Together, their runs fell two short of a double century. How many runs did each one score?

(i) Irfan says that he has 7 marbles more than five times the marbles Parmit has. Irfan has 37 marbles. How many marbles does Parmit have?

(ii) Laxmi's father is 49 years old. He is 4 years older than three times Laxmi's age. What is Laxmi's age?

(iii) People of Sundargram planted trees in the village garden. Some of the trees were fruit trees. The number of non-fruit trees were two more than three times the number of fruit trees. What was the number of fruit trees planted if the number of non-fruit trees planted was 77?