



# Teaching Learning Material

Class - 7<sup>th</sup>

Subject - Mathematics

Section - All

subject teacher - Bandana Kumari

## From Solution To Equation

We have been solving linear equation so far. So, now here we have to know how to form an equation from given solution.

**Note:- we can construct infinite number of equations from the given solution.**

Let us take an example for better understanding.

Example . Construct three equations starting with  $x=3$ .

Solution:- first equation:

Start with  $x=3$

Multiply both sides by 2,  $2x=6$  (this is also an equation)

Add 3 to both sides,  $2x+3=9$  Ans.

:- Second equation:

Start with  $x=3$

Multiply both sides by -4,  $-4x=-12$  Ans.

:- Third equation:

Start with  $x=3$

Divide both sides by 6,  $\frac{x}{6} = \frac{3}{6}$

Subtract 3 from both sides,  $\frac{x}{6} - 3 = \frac{3}{6} - 3 = \frac{-15}{6}$  Ans.

Note:- we can add, subtract, multiply, divide (by any number except 0 in case of multiplication and division) the solution of an equation to get an equation.

## PRACTICE SHEET

### EXERCISE

1. Solve the following equations:

(i)  $12t - 5 = 25$

(ii)  $5q + 28 = 10$

(iii)  $\frac{5}{2}y = 10$

(iv)  $\frac{5}{2}x = \frac{25}{4}$

(v)  $-2x + \frac{1}{2} = \frac{7}{2}$

(vi)  $\frac{2b}{3} - 5 = 3$

2. Solve the following equations:

(i)  $4(t+3) = 18$

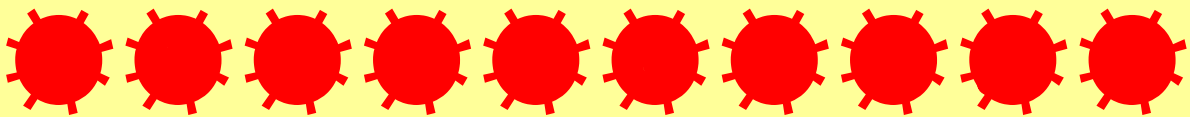
(ii)  $-4(n+3) = 5$

(iii)  $6(n-5) = 30$

(iv)  $3(n-5) = -21$

(v)  $3 - 2(2-y) = 7$

(vi)  $4 + 5(p-1) = 34$



#DON'T\_LOCKDOWN\_YOUR\_LEARNING