

CHAPTER 9

LINEAR EQUATIONS IN ONE VARIABLE

More Questions for Practice

1. Solve for x ; the following equations:

(a) $x - 2 = 7$

(b) $2x - 1 = 3$

(c) $3x = -21$

(d) $\frac{x}{7} = 2$

2. Write an equation for each of the following statements:

(a) The sum of an even number and 7 is 13.

(b) Four times a number decreased by 3 equals 29.

(c) One-third of a number is 10.

(d) When a number is added to 1, the result is 5 more than twice the number.

3. Work out the value of x for each of the following:

(a) 3 times the sum of x and 7 equals 45.

(b) The difference of twice of x and 8 is 16.

(c) The sum of three even number $2x$, $2x + 2$ and $2x + 4$ is 36.

(d) A book costs ₹ x and a notebook costs ₹ 10. The total cost of one book and one notebook is ₹ 76.

4. Check if $x = 3$ is the solution of the equation or not:

(a) $x + 3 = 0$

(b) $2x - 6 = 0$

(c) $3 - x = 0$

(d) $3x = 1$

(e) $\frac{x}{3} = 1$

(f) $9 - 3x = 0$.

ANSWERS

1. (a) 9 (b) 2 (c) -7 (d) 14

2. (a) $x + 7 = 13$ (x is an even integer.)

(b) $4x - 3 = 29$ (x is a positive integer.)

(c) $\frac{1}{3}x = 10$ (x is a positive integer.)

(d) $x + 1 = 2x + 5$

3. (a) $x = 8$ (b) $x = 12$ (c) $x = 5$ (d) $x = 66$

4. (a) No (b) Yes (c) Yes (d) No (e) Yes (f) Yes.