

Exercise 2.1

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Solve the following equations.

1. $x - 2 = 7$

Solution:

$$x - 2 = 7$$

$$x = 7 + 2$$

$$x = 9$$

2. $y + 3 = 10$

Solution:

$$y + 3 = 10$$

$$y = 10 - 3$$

$$y = 7$$

3. $6 = z + 2$

Solution:

$$6 = z + 2$$

$$z + 2 = 6$$

$$z = 6 - 2$$

$$z = 4$$

4. $\frac{3}{7} + x = \frac{17}{7}$

Solution:

$$\frac{3}{7} + x = \frac{17}{7}$$

$$x = \frac{17}{7} - \frac{3}{7}$$

$$x = \frac{14}{7}$$

$$x = 2$$

5. $6x = 12$

Solution:

$$6x = 12$$

$$x = \frac{12}{6}$$

$$x = 2$$

6. $\frac{t}{5} = 10$

Solution:

$$\frac{t}{5} = 10$$

$$t = 10 \times 5$$
$$t = 50$$

7. $\frac{2x}{3} = 18$

Solution:

$$\frac{2x}{3} = 18$$
$$2x = 18 \times 3$$
$$2x = 54$$
$$x = \frac{54}{2}$$
$$x = 27$$

8. $1.6 = \frac{y}{1.5}$

Solution:

$$1.6 = \frac{y}{1.5}$$
$$\frac{y}{1.5} = 1.6$$
$$y = 1.6 \times 1.5$$
$$y = 2.4$$

9. $7x - 9 = 16$

Solution:

$$7x - 9 = 16$$
$$7x = 16 + 9$$
$$7x = 25$$
$$x = \frac{25}{7}$$

10. $14y - 8 = 13$

Solution:

$$14y - 8 = 13$$
$$14y = 13 + 8$$
$$14y = 21$$
$$y = \frac{21}{14}$$
$$y = \frac{3}{2}$$

11. $17 + 6p = 9$

Solution:

$$17 + 6p = 9$$
$$6p = 9 - 17$$
$$6p = -8$$

$$p = \frac{-8}{6}$$
$$p = \frac{-4}{3}$$

12. $\frac{x}{3} + 1 = \frac{7}{15}$

Solution:

$$\frac{x}{3} + 1 = \frac{7}{15}$$

$$\frac{x}{3} = \frac{7}{15} - 1$$

$$\frac{x}{3} = \frac{7-15}{15}$$

$$\frac{x}{3} = \frac{-8}{15}$$

$$x = \frac{-8}{15} \times 3$$

$$x = \frac{-8}{5}$$