

Important Questions for CBSE Class 7 Mathematics

Simple Equations- Chapter 4/Model Questions

1. Write equations for the following statements:

i) The sum of numbers y and 7 is 10.

ii) Number 3 is subtracted from twice a number p is 5.

iii) One-third of a number x gives 6.

iv) 5 is added to three times a number z gives 9.

Solution:

i) $y + 7 = 10$

ii) $2p - 3 = 5$

iii) $\frac{1}{3}x = 6$

iv) $5 + 3z = 9$

2. Solve $2(x + 6) = -8$

Solution:

$$2(x + 6) = -8$$

$$2x + 12 = -8$$

$$2x = -8 - 12$$

$$2x = -20$$

$$x = \frac{-20}{2} = -10$$

3. Solve $\frac{y}{4} = \frac{9}{6}$

Solution:

$$\frac{y}{4} = \frac{9}{6}$$

$$6y = 4 \times 9$$

$$6y = 36$$

$$y = \frac{36}{6} = 6$$

4. Write an equation for the following statement and solve it:

6 is added to three times a number y gives 36.

Solution:

$$\text{Equation is } 6 + 3y = 36$$

$$3y = 36 - 6$$

$$3y = 30$$

$$y = \frac{30}{3} = 10$$

5. The sum of 2 consecutive numbers is 27. Find the numbers.

Solution:

Let the two consecutive numbers be x and $x + 1$.

$$\text{Given } x + x + 1 = 27$$

$$2x + 1 = 27$$

$$2x = 27 - 1$$

$$2x = 26$$

$$x = \frac{26}{2} = 13$$

The numbers are 13 and 14.

6. The sum of 4 times a number and 8 is 40. Find the number?

Solution:

Let the number be x .

$$\text{Given } 4x + 8 = 40$$

$$4x = 40 - 8$$

$$4x = 32$$

$$x = \frac{32}{4} = 8$$

7. Solve $2(m - 3) = 3(2m + 1)$

Solution:

$$2(m - 3) = 3(2m + 1)$$

$$2m - 6 = 6m + 3$$

$$2m - 6m = 3 + 6$$

$$-4m = 9$$

$$m = \frac{-9}{4}$$
