

EduSahara™ Learning Center Assignment**Grade : Class X, ICSE****Chapter : Quadratic Equations****Name : Finding Quadratic Equations when Roots are given**

1. Find the quadratic equation with roots $(-\frac{7}{5}), (-\frac{7}{5})$

(i) $(5x^2 + 12x + 7) = 0$

(ii) $(25x^2 + 70x + 49) = 0$

(iii) $(25x^2 + 80x + 63) = 0$

(iv) $(15x^2 + 56x + 49) = 0$

2. Find the quadratic equation with roots $(\frac{9}{5}, \frac{1}{7})$

(i) $(45x^2 - 86x + 9) = 0$

(ii) $(35x^2 - 78x + 27) = 0$

(iii) $(35x^2 - 54x + 7) = 0$

(iv) $(35x^2 - 68x + 9) = 0$

(v) $(7x^2 - 22x + 3) = 0$

3. Find the quadratic equation with roots $(5, 5)$

(i) $(x^2 - 8x + 15) = 0$

(ii) $(x^2 - 12x + 35) = 0$

(iii) $(x^2 - 9x + 20) = 0$

(iv) $(x^2 - 11x + 30) = 0$

(v) $(x^2 - 10x + 25) = 0$

4. Find the quadratic equation with roots ()

-6 , -5

(i) $(x^2 + 10x + 24) = 0$

(ii) $(x^2 + 11x + 30) = 0$

(iii) $(x^2 + 9x + 18) = 0$

(iv) $(x^2 + 14x + 45) = 0$

(v) $(x^2 + 12x + 35) = 0$

5. Find the quadratic equation, the sum of whose roots is 16 and product is 64

(i) $(x^2 - 14x + 64) = 0$

(ii) $(2x^2 - 16x + 64) = 0$

(iii) $(x^2 - 16x + 64) = 0$

(iv) $(-16x + 64) = 0$

(v) $(x^2 - 18x + 64) = 0$

6. Find the quadratic equation, the sum of whose roots is -12 and product is 27

(i) $(x^2 + 14x + 27) = 0$

(ii) $(2x^2 + 12x + 27) = 0$

(iii) $(x^2 + 12x + 27) = 0$

(iv) $(12x + 27) = 0$

(v) $(x^2 + 9x + 27) = 0$

7. Find the quadratic equation, the sum of whose roots is -1 and product is $\frac{1}{4}$

(i) $(3x^2 + 4x + 1) = 0$

(ii) $(4x^2 + 4x + 1) = 0$

$$(iii) \quad (4x^2 + x + 1) = 0$$

$$(iv) \quad (4x^2 + 7x + 1) = 0$$

$$(v) \quad (5x^2 + 4x + 1) = 0$$

8. Find the quadratic equation, the sum of whose roots is $\frac{51}{28}$ and product is $(\frac{-27}{28})$

$$(i) \quad (28x^2 - 51x - 27) = 0$$

$$(ii) \quad (28x^2 - 53x - 27) = 0$$

$$(iii) \quad (28x^2 - 49x - 27) = 0$$

$$(iv) \quad (29x^2 - 51x - 27) = 0$$

$$(v) \quad (27x^2 - 51x - 27) = 0$$

9. Find the quadratic equation whose roots are $(5 - 6\sqrt{5})$ and $(5 + 6\sqrt{5})$

$$(i) \quad (-10x - 155) = 0 \quad (ii) \quad (x^2 - 10x - 155) = 0$$

$$(iii) \quad (2x^2 - 10x - 155) = 0 \quad (iv) \quad (x^2 - 13x - 155) = 0$$

$$(v) \quad (x^2 - 8x - 155) = 0$$

Assignment Key

- 1) (ii)
- 2) (iv)
- 3) (v)
- 4) (ii)
- 5) (iii)
- 6) (iii)
- 7) (ii)
- 8) (i)
- 9) (ii)