

EduSahara™ Learning Center Assignment**Grade : Class X, ICSE****Chapter : Quadratic Equations****Name : Quadratic Equations1**

1. Solve : $9x^2 - 4a^2b^2 = 0$

(i) $-\frac{2ab}{3}, \frac{6ab}{9}$ (ii) $-\frac{4ab}{3}, \frac{4ab}{9}$ (iii) $0, \frac{8ab}{9}$

(iv) $-\frac{2ab}{5}, \frac{6ab}{11}$ (v) $-2ab, \frac{6ab}{7}$

2. Solve : $12x^2b^2 - axb - a^2 = 0$

(i) $-\frac{3a}{4b}, -\frac{a}{3b}$ (ii) $-\frac{a}{6b}, \frac{a}{5b}$ (iii) $-\frac{a}{4b}, \frac{a}{3b}$

(iv) $-\frac{a}{2b}, \frac{a}{b}$ (v) $\frac{a}{4b}, \frac{a}{b}$

3. Solve : $16x^2 - 8ax - 3a^2 = 0$

(i) $0, a$ (ii) $-\frac{a}{2}, \frac{a}{2}$ (iii) $-\frac{a}{3}, a$

(iv) $-\frac{a}{5}, \frac{3a}{5}$ (v) $-\frac{a}{4}, \frac{6a}{8}$

4. Solve : $10x^2 - 9bx + 2b^2 = 0$

(i) $-\frac{b}{2}, 0$ (ii) $b, \frac{2b}{3}$ (iii) $\frac{b}{2}, \frac{2b}{5}$

(iv) $\frac{b}{4}, \frac{2b}{7}$ (v) $\frac{3b}{2}, \frac{4b}{5}$

5. Solve : $18x^2a^2 - 27xa + 10 = 0$

(i) $\frac{5}{8a}, \frac{1}{2a}$ (ii) $\frac{1}{2a}, \frac{1}{3a}$ (iii) $\frac{7}{6a}, \frac{1}{a}$

(iv) $\frac{5}{6a}, \frac{4}{6a}$ (v) $\frac{5}{4a}, \frac{1}{a}$

6. Solve : $24x^2b^2 + xb - 10 = 0$

(i) $\frac{3}{8b}, -\frac{8}{9b}$ (ii) $\frac{7}{8b}, -\frac{4}{9b}$ (iii) $\frac{5}{6b}, -\frac{6}{7b}$

(iv) $\frac{5}{8b}, -\frac{2}{3b}$ (v) $\frac{1}{2b}, -\frac{6}{11b}$

7. Solve : $27x^2 - 15a^2bx + 2a^4b^2 = 0$

(i) $\frac{2a^2b}{3}, \frac{4a^2b}{9}$ (ii) $\frac{a^2b}{2}, \frac{2a^2b}{7}$ (iii) $0, 0$

(iv) $\frac{2a^2b}{6}, \frac{2a^2b}{9}$ (v) $\frac{a^2b}{4}, \frac{2a^2b}{11}$

8. Solve : $45x^2a^4b^2 - 32xa^2b + 3 = 0$

(i) $\frac{1}{3a^2b}, \frac{1}{a^2b}$ (ii) $-\frac{1}{9a^2b}, \frac{1}{5a^2b}$ (iii) $\frac{1}{9a^2b}, \frac{3}{5a^2b}$

(iv) $\frac{1}{11a^2b}, \frac{3}{7a^2b}$ (v) $\frac{1}{7a^2b}, \frac{1}{a^2b}$

9. Solve : $10x^2b^2 - 3a^2xb - a^4 = 0$

(i) $\frac{a^2}{2b}, -\frac{a^2}{5b}$ (ii) $\frac{3a^2}{2b}, \frac{a^2}{5b}$ (iii) $-\frac{a^2}{2b}, -\frac{3a^2}{5b}$

$$(iv) \frac{a^2}{b}, -\frac{a^2}{3b} \quad (v) \frac{a^2}{4b}, -\frac{a^2}{7b}$$

10. Solve : $25x^2a^4 - b^2 = 0$

$$(i) -\frac{b}{7a^2}, \frac{b}{7a^2} \quad (ii) \frac{b}{5a^2}, \frac{3b}{5a^2} \quad (iii) -\frac{b}{5a^2}, \frac{b}{5a^2}$$

$$(iv) -\frac{3b}{5a^2}, -\frac{b}{5a^2} \quad (v) -\frac{b}{3a^2}, \frac{b}{3a^2}$$

11. Solve : $9x^2 - 4a^2b^4 = 0$

$$(i) -2ab^2, \frac{6ab^2}{7} \quad (ii) -\frac{4ab^2}{3}, \frac{4ab^2}{9} \quad (iii) -\frac{2ab^2}{3}, \frac{6ab^2}{9}$$

$$(iv) 0, \frac{8ab^2}{9} \quad (v) -\frac{2ab^2}{5}, \frac{6ab^2}{11}$$

12. Solve : $36x^2 + ab^2x - 21a^2b^4 = 0$

$$(i) \frac{5ab^2}{4}, -\frac{5ab^2}{9} \quad (ii) \frac{ab^2}{2}, -\frac{7ab^2}{11} \quad (iii) \frac{3ab^2}{4}, -\frac{7ab^2}{9}$$

$$(iv) \frac{3ab^2}{2}, -ab^2 \quad (v) \frac{ab^2}{4}, -ab^2$$

13. Solve : $6x^2a^2 + b^2xa - b^4 = 0$

$$(i) -\frac{b^2}{a}, 0 \quad (ii) -\frac{b^2}{3a}, \frac{b^2}{4a} \quad (iii) 0, \frac{2b^2}{3a}$$

$$(iv) -\frac{b^2}{a}, \frac{b^2}{2a} \quad (v) -\frac{b^2}{2a}, \frac{2b^2}{6a}$$

14. Solve : $15x^2b^4 + 2axb^2 - a^2 = 0$

(i) $\frac{3a}{5b^2}, \frac{a}{3b^2}$ (ii) $\frac{a}{3b^2}, -\frac{a}{b^2}$ (iii) $-\frac{a}{5b^2}, -\frac{a}{b^2}$

(iv) $\frac{a}{5b^2}, -\frac{a}{3b^2}$ (v) $\frac{a}{7b^2}, -\frac{a}{5b^2}$

15. Solve : $8x^2 - 4x - 6xb + 3b = 0$

(i) $\frac{2}{3}, b$ (ii) $\frac{3}{4}, b$ (iii) $\frac{2}{5}, \frac{3b}{5}$

(iv) $\frac{4}{8}, \frac{6b}{8}$ (v) $\frac{1}{4}, \frac{b}{2}$

16. Solve : $6x^2b - 4xb - 3x + 2 = 0$

(i) $0, -\frac{1}{2b}$ (ii) $2, \frac{1}{b}$ (iii) $\frac{2}{3}, \frac{1}{2b}$

(iv) $\frac{4}{3}, \frac{3}{2b}$ (v) $\frac{2}{5}, \frac{1}{4b}$

17. Solve : $9x^2 + 3ax + 3x + a = 0$

(i) $-a, -\frac{1}{2}$ (ii) $-\frac{a}{3}, -\frac{1}{3}$ (iii) $-\frac{a}{5}, -\frac{1}{4}$

(iv) $\frac{a}{3}, 0$ (v) $-a, -\frac{2}{3}$

18. Solve : $18x^2 - 9x + 10xb - 5b = 0$

(i) $\frac{1}{7}, -\frac{5b}{7}$ (ii) $\frac{1}{2}, -\frac{5b}{9}$ (iii) $\frac{1}{4}, -\frac{5b}{11}$

$$(iv) -\frac{1}{2}, -\frac{7b}{9} \quad (v) \frac{3}{2}, -\frac{b}{3}$$

19. Solve : $63x^2a + 54x + 35xa + 30 = 0$

$$(i) -\frac{6}{7a}, -\frac{5}{9} \quad (ii) -\frac{6}{5a}, -\frac{5}{7} \quad (iii) -\frac{4}{7a}, -\frac{1}{3}$$

$$(iv) -\frac{8}{7a}, -\frac{7}{9} \quad (v) -\frac{2}{3a}, -\frac{5}{11}$$

20. Solve : $6x^2b + 3xb - 4x - 2 = 0$

$$(i) \frac{1}{2}, \frac{1}{b} \quad (ii) -\frac{1}{4}, \frac{1}{2b} \quad (iii) -\frac{1}{2}, \frac{4}{6b}$$

$$(iv) -1, \frac{1}{b} \quad (v) -\frac{3}{2}, \frac{1}{3b}$$

Assignment Key

- 1) (i)
- 2) (iii)
- 3) (v)
- 4) (iii)
- 5) (iv)
- 6) (iv)
- 7) (iv)
- 8) (iii)
- 9) (i)
- 10) (iii)
- 11) (iii)
- 12) (iii)
- 13) (v)
- 14) (iv)
- 15) (iv)
- 16) (iii)
- 17) (ii)
- 18) (ii)
- 19) (i)
- 20) (iii)