EduSahara™ Assignment

Name : Quadratic Equations1

Chapter : Quadratic Equations

Grade : CBSE Grade X

1. Solve : $12x^2 - 13abx + 3a^2b^2 = 0$

(i) $ab, \frac{3ab}{2}$ (ii) $\frac{ab}{3}, \frac{3ab}{4}$ (iii) $-\frac{ab}{3}, \frac{ab}{4}$ (iv) $\frac{ab}{5}, \frac{ab}{2}$ (v) $ab, \frac{5ab}{4}$

2. Solve : $30x^2b^2 - 19axb - 5a^2 = 0$

(i) $\frac{7a}{6b}, \frac{a}{5b}$ (ii) $\frac{a}{2b}, -\frac{3a}{5b}$ (iii) $\frac{5a}{6b}, -\frac{a}{5b}$ (iv) $\frac{5a}{8b}, -\frac{a}{7b}$ (v) $\frac{5a}{4b}, -\frac{a}{3b}$

3. Solve : $18x^2 + 13ax + 2a^2 = 0$

(i) $-\frac{2a}{7}, -\frac{3a}{4}$ (ii) $-\frac{2a}{9}, -\frac{a}{2}$ (iii) $0, -\frac{a}{6}$ (iv) $-\frac{4a}{9}, -\frac{5a}{6}$ (v) $-\frac{2a}{11}, -\frac{3a}{8}$

4. Solve : $18x^2a^2 - 5xa - 2 = 0$

(i) $\frac{3}{2a}, 0$ (ii) $-\frac{1}{2a}, -\frac{4}{9a}$ (iii) $\frac{1}{2a}, -\frac{2}{9a}$ (iv) $\frac{1}{a}, -\frac{2}{7a}$ (v) $\frac{1}{4a}, -\frac{2}{11a}$

5. Solve : $27x^2 - 39bx + 14b^2 = 0$

(i) $0, \frac{5b}{9}$ (ii) $\frac{2b}{5}, \frac{7b}{11}$ (iii) $2b, b$ (iv) $\frac{4b}{3}, b$ (v) $\frac{2b}{3}, \frac{7b}{9}$

6. Solve : $40x^2b^2 + 39xb + 9 = 0$

(i) $-\frac{3}{5b}, -\frac{3}{8b}$ (ii) $-\frac{1}{5b}, -\frac{1}{8b}$ (iii) $-\frac{1}{b}, -\frac{1}{2b}$ (iv) $-\frac{3}{7b}, -\frac{3}{10b}$ (v) $-\frac{1}{b}, -\frac{5}{8b}$

7. Solve : $12x^2 + a^2bx - 6a^4b^2 = 0$

(i) $-\frac{5a^2b}{4}, 0$ (ii) $-\frac{a^2b}{2}, \frac{2a^2b}{5}$ (iii) $-\frac{3a^2b}{2}, 2a^2b$ (iv) $-\frac{a^2b}{4}, \frac{4a^2b}{3}$ (v) $-\frac{3a^2b}{4}, \frac{2a^2b}{3}$

8. Solve : $63x^2a^4b^2 + 16xa^2b + 1 = 0$

(i) $-\frac{1}{7a^2b}, -\frac{1}{5a^2b}$ (ii) $-\frac{1}{3a^2b}, -\frac{3}{7a^2b}$ (iii) $\frac{1}{9a^2b}, \frac{1}{7a^2b}$ (iv) $-\frac{1}{11a^2b}, -\frac{1}{9a^2b}$ (v) $-\frac{1}{9a^2b}, -\frac{1}{7a^2b}$

9. Solve : $12x^2b^2 + 4a^2xb - 5a^4 = 0$

(i) $-\frac{a^2}{2b}, \frac{3a^2}{2b}$ (ii) $-\frac{5a^2}{8b}, \frac{a^2}{4b}$ (iii) $-\frac{5a^2}{6b}, \frac{a^2}{2b}$ (iv) $-\frac{7a^2}{6b}, -\frac{a^2}{2b}$ (v) $-\frac{5a^2}{4b}, \frac{a^2}{b}$

10. Solve : $40x^2a^4 + 57bxa^2 + 20b^2 = 0$

(i) $-\frac{4b}{3a^2}, -\frac{5b}{6a^2}$ (ii) $-\frac{2b}{5a^2}, -\frac{3b}{8a^2}$ (iii) $-\frac{6b}{5a^2}, -\frac{7b}{8a^2}$ (iv) $-\frac{4b}{5a^2}, -\frac{5b}{8a^2}$ (v) $-\frac{4b}{7a^2}, -\frac{b}{2a^2}$

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

(i) $\frac{ab^2}{7}, -\frac{ab^2}{3}$ (ii) $\frac{ab^2}{9}, -\frac{ab^2}{4}$ (iii) $\frac{3ab^2}{7}, 0$ (iv) $\frac{ab^2}{5}, -\frac{ab^2}{2}$ (v) $-\frac{ab^2}{7}, -\frac{2ab^2}{3}$

12. Solve : $16x^2 - 2ab^2x - 3a^2b^4 = 0$

(i) $-\frac{3ab^2}{10}, \frac{ab^2}{4}$ (ii) $-\frac{5ab^2}{8}, -\frac{ab^2}{2}$ (iii) $-\frac{3ab^2}{8}, \frac{ab^2}{2}$ (iv) $-\frac{ab^2}{8}, \frac{3ab^2}{2}$ (v) $-\frac{ab^2}{2}, ab^2$

13. Solve : $6x^2a^2 + 7b^2xa + 2b^4 = 0$

(i) $\frac{b^2}{2a}, -\frac{4b^2}{9a}$ (ii) $-\frac{b^2}{4a}, -\frac{6b^2}{11a}$ (iii) $-\frac{b^2}{a}, -\frac{6b^2}{7a}$ (iv) $-\frac{b^2}{2a}, -\frac{2b^2}{3a}$ (v) $-\frac{3b^2}{2a}, -\frac{8b^2}{9a}$

14. Solve : $16x^2b^4 + 16axb^2 + 3a^2 = 0$

(i) $-\frac{a}{3b^2}, -\frac{3a}{2b^2}$ (ii) $0, -\frac{a}{4b^2}$ (iii) $-\frac{a}{4b^2}, -\frac{3a}{4b^2}$ (iv) $-\frac{a}{5b^2}, -\frac{a}{2b^2}$ (v) $-\frac{a}{2b^2}, -\frac{5a}{4b^2}$

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

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

16. Solve : $21x^2b - 7xb + 6x - 2 = 0$

(i) $\frac{2}{6}, -\frac{2}{7b}$ (ii) $\frac{1}{4}, -\frac{2}{9b}$ (iii) $\frac{1}{2}, -\frac{2}{5b}$ (iv) $0, -\frac{4}{7b}$ (v) $\frac{2}{3}, 0$

17. Solve : $16x^2 + 8ax + 10x + 5a = 0$

(i) $-\frac{a}{2}, -\frac{5}{8}$ (ii) $-\frac{a}{4}, -\frac{1}{2}$ (iii) $-\frac{3a}{2}, -\frac{7}{8}$ (iv) $-\frac{a}{2}, -\frac{3}{8}$ (v) $-a, -\frac{5}{6}$

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

(i) $-\frac{1}{2}, -\frac{3b}{5}$ (ii) $\frac{3}{2}, -\frac{b}{5}$ (iii) $-\frac{1}{2}, -\frac{b}{5}$ (iv) $-\frac{1}{4}, -\frac{b}{7}$ (v) $1, -\frac{b}{3}$

19. Solve : $27x^2a + 24x - 18xa - 16 = 0$

(i) $-\frac{10}{9a}, -\frac{4}{9}$ (ii) $-\frac{8}{9a}, -\frac{6}{9}$ (iii) $-\frac{8}{7a}, -\frac{6}{7}$ (iv) $-\frac{8}{11a}, -\frac{6}{11}$ (v) $-\frac{2}{3a}, -\frac{8}{9}$

20. Solve : $64x^2b + 24xb + 56x + 21 = 0$

(i) $-\frac{3}{8}, -\frac{7}{8b}$ (ii) $-\frac{3}{10}, -\frac{7}{10b}$ (iii) $-\frac{1}{8}, -\frac{5}{8b}$ (iv) $-\frac{5}{8}, -\frac{9}{8b}$ (v) $-\frac{1}{2}, -\frac{7}{6b}$

Assignment Key

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