EduSahara™ Assignment

Name : Quadratic Equations1

Chapter : Quadratic Equations

Grade : CBSE Grade X

1. Solve : $20x^2 + 7abx - 6a^2b^2 = 0$

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

2. Solve : $6x^2b^2 - axb - 2a^2 = 0$

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

3. Solve : $24x^2 + 29ax + 7a^2 = 0$

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

4. Solve : $35x^2a^2 + 11xa - 6 = 0$

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

5. Solve : $12x^2 - bx - 6b^2 = 0$

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

6. Solve : $35x^2b^2 - 18xb - 8 = 0$

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

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

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

8. Solve : $12x^2a^4b^2 - 16xa^2b + 5 = 0$

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

9. Solve : $21x^2b^2 - 17a^2xb + 2a^4 = 0$

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

10. Solve : $27x^2a^4 + 33bxa^2 + 8b^2 = 0$

(i) $-\frac{b}{2a^2}, -\frac{8b}{7a^2}$ (ii) $0, -\frac{2b}{3a^2}$ (iii) $-\frac{b}{3a^2}, -\frac{8b}{9a^2}$ (iv) $-\frac{b}{4a^2}, -\frac{8b}{11a^2}$ (v) $-\frac{2b}{3a^2}, -\frac{10b}{9a^2}$

11. Solve : $10x^2 + 13ab^2x + 4a^2b^4 = 0$

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

12. Solve : $20x^2 + 9ab^2x + a^2b^4 = 0$

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

13. Solve : $14x^2a^2 - 11b^2xa + 2b^4 = 0$

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

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

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

15. Solve : $18x^2 + 9x - 16xb - 8b = 0$

(i) $-\frac{1}{4}, \frac{8b}{11}$ (ii) $\frac{1}{2}, \frac{10b}{9}$ (iii) $-\frac{3}{2}, \frac{2b}{3}$ (iv) $-1, \frac{8b}{7}$ (v) $-\frac{1}{2}, \frac{8b}{9}$

16. Solve : $18x^2b - 4xb + 9x - 2 = 0$

(i) $\frac{2}{11}, -\frac{2}{5b}$ (ii) $\frac{2}{9}, -\frac{1}{2b}$ (iii) $0, -\frac{3}{4b}$ (iv) $\frac{4}{9}, -\frac{1}{4b}$ (v) $\frac{2}{7}, -\frac{2}{3b}$

17. Solve : $25x^2 + 5ax - 20x - 4a = 0$

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

18. Solve : $14x^2 - 10x - 7xb + 5b = 0$

(i) $1, \frac{3b}{4}$ (ii) $1, \frac{5b}{6}$ (iii) $\frac{5}{7}, \frac{3b}{6}$ (iv) $\frac{3}{7}, \frac{b}{6}$ (v) $\frac{5}{9}, \frac{3b}{8}$

19. Solve : $24x^2a - 8x - 3xa + 1 = 0$

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

20. Solve : $16x^2b - 8xb - 14x + 7 = 0$

(i) $\frac{3}{4}, \frac{7}{6b}$ (ii) $\frac{1}{6}, \frac{5}{8b}$ (iii) $\frac{5}{6}, \frac{9}{8b}$ (iv) $\frac{3}{6}, \frac{7}{8b}$ (v) $\frac{3}{8}, \frac{7}{10b}$

Assignment Key

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