EduSahara™ Assignment

Name : Quadratic Equations1

Chapter : Quadratic Equations

Grade : CBSE Grade X

1. Solve : $28x^2 - 5abx - 3a^2b^2 = 0$

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

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

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

3. Solve : $18x^2 + 11ax + a^2 = 0$

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

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

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

5. Solve : $15x^2 - 22bx + 8b^2 = 0$

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

6. Solve : $63x^2b^2 - 85xb + 28 = 0$

(i) $\frac{4}{5b}, \frac{1}{b}$ (ii) $\frac{2}{7b}, \frac{5}{9b}$ (iii) $\frac{4}{7b}, \frac{7}{9b}$ (iv) $\frac{6}{7b}, \frac{1}{b}$ (v) $\frac{4}{9b}, \frac{7}{11b}$

7. Solve : $15x^2 + 2a^2bx - 8a^4b^2 = 0$

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

8. Solve : $40x^2a^4b^2 - xa^2b - 6 = 0$

(i) $\frac{2}{3a^2b}, -\frac{1}{2a^2b}$ (ii) $\frac{2}{5a^2b}, -\frac{3}{8a^2b}$ (iii) $0, -\frac{5}{8a^2b}$ (iv) $\frac{4}{5a^2b}, -\frac{1}{8a^2b}$ (v) $\frac{2}{7a^2b}, -\frac{3}{10a^2b}$

9. Solve : $72x^2b^2 - 17a^2xb + a^4 = 0$

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

10. Solve : $28x^2a^4 - 5bxa^2 - 12b^2 = 0$

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

11. Solve : $36x^2 + 35ab^2x + 6a^2b^4 = 0$

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

12. Solve : $81x^2 - 27ab^2x - 4a^2b^4 = 0$

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

13. Solve : $45x^2a^2 - 58b^2xa + 16b^4 = 0$

(i) $\frac{10b^2}{9a}, \frac{4b^2}{5a}$ (ii) $\frac{8b^2}{7a}, \frac{2b^2}{3a}$ (iii) $\frac{8b^2}{11a}, \frac{2b^2}{7a}$ (iv) $\frac{2b^2}{3a}, 0$ (v) $\frac{8b^2}{9a}, \frac{2b^2}{5a}$

14. Solve : $12x^2b^4 - 5axb^2 - 3a^2 = 0$

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

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

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

16. Solve : $10x^2b - 8xb + 5x - 4 = 0$

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

17. Solve : $30x^2 + 12ax + 25x + 10a = 0$

(i) $-\frac{2a}{5}, -\frac{5}{6}$ (ii) $0, -\frac{1}{2}$ (iii) $-\frac{4a}{5}, -\frac{7}{6}$ (iv) $-\frac{2a}{7}, -\frac{5}{8}$ (v) $-\frac{2a}{3}, -\frac{5}{4}$

18. Solve : $30x^2 + 18x - 25xb - 15b = 0$

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

19. Solve : $35x^2a - 5x - 28xa + 4 = 0$

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

20. Solve : $21x^2b - 14xb - 18x + 12 = 0$

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

Assignment Key

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