



1. Find the discriminant of the quadratic equation  $(x^2 - 2x - 3) = 0$

- (i) 13 (ii) 15 (iii) 16 (iv) 17 (v) 18

2. Find the discriminant of the quadratic equation  $(4x^2 - 4) = 0$

- (i) 67 (ii) 63 (iii) 64 (iv) 65 (v) 61

3. Find the discriminant of the quadratic equation  $(x^2 + 2x + 6) = 0$

- (i) -21 (ii) -18 (iii) -22 (iv) -19 (v) -20

4. Find the discriminant of the quadratic equation  $(-3x^2 + 7x - 6) = 0$

- (i) -22 (ii) -24 (iii) -25 (iv) -21 (v) -23

5. Find the discriminant of the quadratic equation  $(x^2 + 8x + 16) = 0$

- (i) -1 (ii) 0 (iii) 1 (iv) 3 (v) -3

6. Find the discriminant of the quadratic equation  $(x^2 + 10x + 25) = 0$

- (i) 1 (ii) -3 (iii) -1 (iv) 0 (v) 2

7. Find the roots of the quadratic equation  $(x^2 - 10x + 9) = 0$

- (i) (12, 0) (ii) (10, 0) (iii) (10, 1) (iv) (9, 1) (v) (12, -2)

8. Find the roots of the quadratic equation  $(x^2 + 10x + 9) = 0$

- (i) (-1, -9) (ii) (0, -9) (iii) (2, -10) (iv) (0, -10) (v) (2, -11)

9. Find the roots of the quadratic equation  $(27x^2 + 51x + 10) = 0$

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

10. Find the roots of the quadratic equation  $(24x^2 + 11x + 1) = 0$

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

11. The sum of the roots of the quadratic equation  $x^2 = 0$  is

- (i) 1 (ii) 3 (iii) -1 (iv) -3 (v) 0

12. The sum of the roots of the quadratic equation  $(x^2 + 12x + 35) = 0$  is

- (i) -10 (ii) -12 (iii) -13 (iv) -11 (v) -14

13. The sum of the roots of the quadratic equation  $(16x^2 + 48x + 36) = 0$  is

- (i) -3 (ii) 0 (iii) -4 (iv) -6 (v) -2

14. The sum of the roots of the quadratic equation  $(35x^2 + 8x - 3) = 0$  is

- (i)  $(-\frac{8}{35})$  (ii)  $(-\frac{8}{37})$  (iii)  $(-\frac{8}{33})$  (iv)  $(-\frac{6}{35})$  (v)  $(-\frac{2}{7})$

15. The product of the roots of the quadratic equation  $(x^2 - 14x + 49) = 0$  is

- (i) 51 (ii) 47 (iii) 48 (iv) 50 (v) 49

16. The product of the roots of the quadratic equation  $(x^2 - 7x + 6) = 0$  is

- (i) 6 (ii) 9 (iii) 5 (iv) 7 (v) 4

17. The product of the roots of the quadratic equation  $(25x^2 - 40x + 16) = 0$  is

- (i)  $\frac{16}{25}$  (ii)  $\frac{16}{23}$  (iii)  $\frac{14}{25}$  (iv)  $\frac{18}{25}$  (v)  $\frac{16}{27}$

18. The product of the roots of the quadratic equation  $(8x^2 + 28x + 12) = 0$  is

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

19. Find the roots of the quadratic equation  $(-4x^2 - 7x + 5) = 0$

- (i)  $((-\frac{5}{8} - \frac{1}{8}\sqrt{129}), (-\frac{9}{8} + \frac{1}{8}\sqrt{129}))$  (ii)  $((-\frac{7}{8} - \frac{1}{8}\sqrt{129}), (-\frac{7}{8} + \frac{1}{8}\sqrt{129}))$

- (iii)  $((-\frac{5}{8} - \frac{1}{8}\sqrt{129}), (-\frac{7}{8} + \frac{129}{8}))$  (iv)  $((-\frac{7}{8} - \frac{1}{8}\sqrt{129}), (-\frac{7}{8} + \frac{129}{8}))$  (v)  $((-\frac{7}{8} - \frac{1}{8}\sqrt{129}), (-\frac{7}{8} + \frac{1}{8}\sqrt{129}))$

## Assignment Key

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