

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

1. Find the discriminant of the quadratic equation $(x^2 + 8x + 15) = 0$

(i) 4 (ii) 5 (iii) 7 (iv) 3 (v) 2

2. Find the discriminant of the quadratic equation $(-20x^2 + 10x) = 0$

(i) 102 (ii) 101 (iii) 100 (iv) 97 (v) 99

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

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

4. Find the discriminant of the quadratic equation $(12x^2 - 4x + 4) = 0$

(i) -177 (ii) -179 (iii) -175 (iv) -173 (v) -176

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

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

6. Find the discriminant of the quadratic equation $(25x^2 + 30x + 9) = 0$

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

7. Find the roots of the quadratic equation $(x^2 - 10x + 16) = 0$

(i) (10, -1) (ii) (9, 2) (iii) (9, 1) (iv) (10, 1) (v) (8, 2)

8. Find the roots of the quadratic equation $(x^2 + 8x + 15) = 0$

(i) (-2, -6) (ii) (-2, -5) (iii) (0, -6) (iv) (0, -8) (v) (-3, -5)

9. Find the roots of the quadratic equation $(8x^2 + 18x + 9) = 0$

- (i) $(\frac{-1}{4}, -2)$ (ii) $(\frac{-1}{2}, \frac{-3}{2})$ (iii) $(\frac{-1}{4}, \frac{-5}{2})$ (iv) $(\frac{-3}{4}, \frac{-3}{2})$ (v) $(\frac{-1}{2}, -2)$
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10. Find the roots of the quadratic equation $(36x^2 - 16) = 0$

- (i) $(\frac{4}{3}, \frac{-4}{3})$ (ii) $(\frac{2}{3}, \frac{-2}{3})$ (iii) $(\frac{2}{5}, \frac{-2}{3})$ (iv) $(\frac{2}{5}, -2)$ (v) $(\frac{4}{3}, -2)$
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11. The sum of the roots of the quadratic equation $(x^2 + 8x + 16) = 0$ is

- (i) -9 (ii) -8 (iii) -5 (iv) -11 (v) -7
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12. The sum of the roots of the quadratic equation $(x^2 + x - 12) = 0$ is

- (i) -1 (ii) -2 (iii) 0 (iv) 2 (v) -4
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13. The sum of the roots of the quadratic equation $(49x^2 + 14x + 1) = 0$ is

- (i) $(\frac{-2}{7})$ (ii) $(\frac{-2}{9})$ (iii) $(\frac{-2}{5})$ (iv) $(\frac{-4}{7})$ (v) 0
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14. The sum of the roots of the quadratic equation $(-15x^2 - 57x - 36) = 0$ is

- (i) $(\frac{-19}{5})$ (ii) $(\frac{-25}{7})$ (iii) $(\frac{-13}{3})$ (iv) $(\frac{-21}{5})$ (v) $(\frac{-17}{5})$
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15. The product of the roots of the quadratic equation $x^2 = 0$ is

- (i) -1 (ii) 1 (iii) 0 (iv) 2 (v) -3
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16. The product of the roots of the quadratic equation $(x^2 + 10x + 21) = 0$ is

- (i) 19 (ii) 20 (iii) 21 (iv) 22 (v) 23
-

17. The product of the roots of the quadratic equation $(36x^2 + 96x + 64) = 0$ is

- (i) $\frac{18}{11}$ (ii) $\frac{14}{9}$ (iii) 2 (iv) $\frac{16}{9}$
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18. The product of the roots of the quadratic equation $(20x^2 + 61x + 45) = 0$ is

- (i) $\frac{9}{4}$ (ii) $\frac{11}{4}$ (iii) $\frac{13}{6}$ (iv) $\frac{5}{2}$ (v) $\frac{7}{4}$
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19. Find the roots of the quadratic equation $(-x^2 + 8x + 4) = 0$

(i) $((4 - 2\sqrt{5}), (4 + 10))$

(ii) $((6 - 2\sqrt{5}), (4 + 10))$

(iii) $((4 - 2\sqrt{5}), (4 + 2\sqrt{5}))$

(iv) $((4 - 2\sqrt{5}), (4 + 2\sqrt{5}))$

(v) $((6 - 2\sqrt{5}), (1 + 2\sqrt{5}))$

Assignment Key

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