



Eleventh Grade - Algebra

1) Find the zeroes of the following quadratic polynomial: $x^2 - 2x - 8$

- (5, 4)
- (7, 4)
- (-2, 4)
- (2, -4)

2) Find the zeroes of the following quadratic polynomial $4s^2 - 4s + 1$

- $1/2$
- $3/4$
- $5/2$
- $2/3$

3) Find the zeroes of the following quadratic polynomial $6x^2 - 3 - 7x$

- $(1/2, 3/2)$
- $(-1/2, 3/2)$
- $(-1/4, 5/8)$
- $(-1/3, 7/2)$

4) Find the zeroes of the following quadratic polynomial: $4u^2 + 8u$

- (0, 3)
- (0, -2)
- (5, 0)
- (0, -1)

5) Find the zeroes of the following quadratic polynomial: $t^2 - 15$



- $\pm?15$
- $\pm?11$
- $\pm?19$
- $\pm?18$

6) Find the zeroes of the following quadratic polynomial $3x^2 - x - 4$

- $(2/3, -1)$
- $(7/3, 1)$
- $(4/3, 1)$
- $(2/3, -2)$

7) Find a quadratic polynomial each with the given numbers as the sum and product of its zeroes respectively $1/4, -1$

- $4x^2 - x - 1$
- $6x^2 - x - 2$
- $6x^2 - 3x - 1$
- $8x^2 - 4x - 7$

8) Find a quadratic polynomial each with the given numbers as the sum and product of its zeroes respectively $?2, 1/3$

- $4x^2 - 5?2x + 4$
- $3x^2 - 3?2x + 1$
- $3x^2 - 4?2x + 2$
- $7x^2 - 6?2x + 5$

9) Find a quadratic polynomial each with the given numbers as the sum and product of its zeroes respectively $0, ?5$

- $2x^2 + ?5$
- $x^2 + ?5$
- $x^2 + ?7$



- $x^2 + 78$

10) Find a quadratic polynomial each with the given numbers as the sum and product of its zeroes respectively: 1, 1

- $x^2 + x + 9$
- $x^2 - 2x + 3$
- $x^2 - x + 1$
- $x^2 - 2x + 8$

11) Find a quadratic polynomial each with the given numbers as the sum and product of its zeroes respectively: $-1/4$, $1/4$

- $4x^2 - x - 1$
- $4x^2 + 5x + 5$
- $4x^2 + 4x + 1$
- $4x^2 + x + 1$

12) Find a quadratic polynomial each with the given numbers as the sum and product of its zeroes respectively: 4, 1

- $3x^2 - 4x + 3$
- $2x^2 - 5x + 3$
- $x^2 - 4x + 1$
- $2x^2 - 4x + 5$

13) Given the linear equation $2x + 3y - 8 = 0$; write another linear equation in two variables such that the geometrical representation of the pair so formed is Intersecting lines.

- $6x + 7y - 8 = 0$
- $4x + 12y - 3 = 0$
- $4x + 4y - 8 = 0$
- $8x + 9y - 18 = 0$



14) Given the linear equation $2x + 3y - 8 = 0$; write another linear equation in two variables such that the geometrical representation of the pair so formed is Parallel lines.

- $7x + 8y - 12 = 0$
- $7x + 7y - 7 = 0$
- $5x + 6y - 10 = 0$
- $4x + 6y - 12 = 0$

15) Given the linear equation $2x + 3y - 8 = 0$; write another linear equation in two variables such that the geometrical representation of the pair so formed is Coincident lines

- $5x + 7y - 10 = 0$
- $9x + 6y - 10 = 0$
- $4x + 6y - 16 = 0$
- $4x + 9y - 12 = 0$

16) Solve the following pair of linear equations by the substitution method. $x + y = 14$ and $x - y = 4$

- (8, 7)
- (7, 8)
- (9, 5)
- (5, 9)

17) Solve the following pair of linear equations by the substitution method. $s - t = 3$ and $s/3 + t/2 = 6$

- (7, 8)
- (4, 7)
- (9, 6)
- (7, 10)

18) Solve the following pair of linear equations by the substitution method. $3x - y = 3$ and $9x - 3y = 9$



- (7, 9)
- (4, 6)
- (3, 1)
- No solution

19) Solve the following pair of linear equations by the substitution method. $0.2x + 0.3y = 1.3$ and $0.4x + 0.5y = 2.3$

- (4, 5)
- (5, 3)
- (5, 7)
- (2, 3)

20) Solve the following pair of linear equations by the substitution method $2x + 3y = 0$ and $3x - 8y = 0$

- (1, 1)
- (0, 1)
- (0, 0)
- (1, -1)

21) Check whether $(x + 1)^2 = 2(x - 3)$ is

- Quadratic equation
- Can't determine
- Not an Quadratic equation
- Data inadequate

22) Check whether $x^2 - 2x = (-2)(3 - x)$ is

- Can't determine
- Data inadequate
- Not an Quadratic equation



- Quadratic equation

23) Check whether $(x - 2)(x + 1) = (x - 1)(x + 3)$

- Not an Quadratic equation
- Quadratic equation
- Data inadequate
- Can't determine

24) Check whether $(x - 3)(2x + 1) = x(x + 5)$ is

- Not an Quadratic equation
- Can't determine
- Quadratic equation
- Data inadequate

25) Check whether $(2x - 1)(x - 3) = (x + 5)(x - 1)$ is

- Not an Quadratic equation
- Can't determine
- Quadratic equation
- Data inadequate

26) Check whether $x^2 + 3x + 1 = (x - 2)^2$ is

- Not an Quadratic equation
- Quadratic equation
- Data inadequate
- Can't determine

27) Check whether $(x + 2)^3 = 2x(x^2 - 1)$ is



- Data inadequate
- Not an Quadratic equation
- Quadratic equation
- Can't determine

28) Check whether $x^3 - 4x^2 - x + 1 = (x - 2)^3$ is

- Data inadequate
- Quadratic equation
- Can't determine
- Not an Quadratic equation

29) The area of a rectangular plot is 528 m². The length of the plot (in meters) is one more than twice its breadth. We need to find the length and breadth of the plot.

- $4x^2 + 3x - 528 = 0$
- $3x^2 + 3x - 528 = 0$
- $2x^2 + x - 528 = 0$
- $2x^2 + 3x - 528 = 0$

30) The product of two consecutive positive integers is 306. We need to find the integers.

- $x^2 + 2x - 306 = 0$
- $2x^2 + 2x - 306 = 0$
- $x^2 + x - 306 = 0$
- $3x^2 + 2x - 306 = 0$