Eleventh Grade - Algebra

1) Find the zeroes of the following quadratic polynomial: x² - 2x - 8

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

2) Find the zeroes of the following quadratic polynomial 4s² - 4s + 1

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

3) Find the zeroes of the following quadratic polynomial 6x² - 3 - 7x

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

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

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

5) Find the zeroes of the following quadratic polynomial: t² - 15



- ±?11
- ±?15
- ±?19
- ±?18

6) Find the zeroes of the following quadratic polynomial 3x² - x - 4

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

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

- 4x² x -1
- 8x² 4x -7
- 6x² x 2
- 6x² 3x -1

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

- 7x² 6?2x + 5
- 3x² 3?2x + 1
- $4x^2 5?2x + 4$
- $3x^2 4?2x + 2$

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

- x² + ?7
- x² + ?5
- 2x² + ?5

• x² + ?8

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

- x² + x + 9
- x² 2x + 3
- x² 2x + 8
- x² x + 1

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

- $4x^2 + 5x + 5$
- $4x^2 + 4x + 1$
- 4x² x 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

- x² 4x + 1
- $3x^2 4x + 3$
- $2x^2 4x + 5$
- $2x^2 5x + 3$

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.

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

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

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

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

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

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, 40)
- (7, 10)

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



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

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

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

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

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

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

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

- Quadratic equation
- Data inadequate
- Not an Quadratic equation

Can't determine

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

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

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

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

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

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

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

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

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



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

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

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

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.

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

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

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