## Eleventh Grade - Algebra

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- $x^{2}+? 7$
- $x^{2}+? 5$
- $2 x^{2}+? 5$
- $x^{2}+? 8$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

27) Check whether $(x+2)^{3}=2 x\left(x^{2}-1\right)$ is

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

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

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

29) The area of a rectangular plot is $528 \mathrm{~m}^{2}$. 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.

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

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

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

