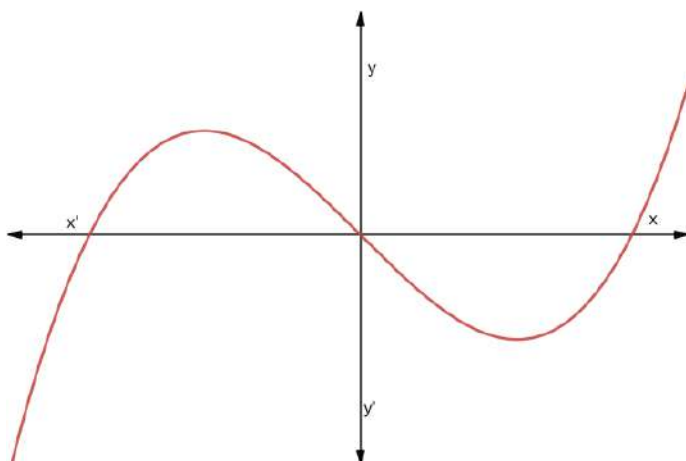


## Zeros of Polynomial

### Multiple choice questions

- 1) A quadratic polynomial has
  - a) 1 zero
  - b) 2 zeros
  - c) No zero
  - d) at most 2 zeros
  
- 2) In quadratic polynomial  $ax^2 + bx + c$ ,  $c \neq 0$ , if zeros are of equal sign, then is a polynomial.
  - a)  $c$  and  $a$  have opposite sign
  - b)  $c$  and  $b$  have same sign
  - c)  $c$  and  $a$  have same sign
  - d)  $c$  and  $b$  have opposite sign
  
- 3) In quadratic polynomial  $ax^2 + bx + c$ ,  $c \neq 0$ , if both zeros are negative, then
  - a)  $a$ ,  $b$  and  $c$  all have same sign
  - b)  $a$  and  $b$  have same sign
  - c)  $a$  and  $c$  have opposite sign
  - d)  $b$  and  $c$  have same sign
  
- 4) Find the number of zeros from the following graph of a polynomial.



- a) 2
- b) 3
- c) 4

d) 1

5) The graph of quadratic polynomial  $ax^2 + bx + c$ ,  $c \neq 0$ , is a parabola which opens upward if

- a)  $a > 0$
- b)  $a \leq 0$
- c)  $a \geq 0$
- d)  $a < 0$

6) The graph of quadratic polynomial  $ax^2 + bx + c$ ,  $c \neq 0$ , is a parabola which opens downward if

- a)  $a > 0$
- b)  $a < 0$
- c)  $a \geq 0$
- d)  $a \leq 0$

7) If graph of a quadratic polynomial does not intersect x-axis at any point, then polynomial has

- a) 1 zero
- b) 2 zeros
- c) 3 zeros
- d) No zeros

8) Number of zeros at which graph of  $y = x + 5$  intersects x - axis are

- a) 1
- b) 2
- c) 3
- d) 0

9) Zeros of polynomial  $x^2 - 25$ , are

- a) 5 and 5
- b) 5 and -5
- c) 2 and -5
- d) -5 and -5

10) A polynomial of degree n has number of zeros

- a) equal to n
- b) less than n
- c) less than or equal to n
- d) greater than or equal to n