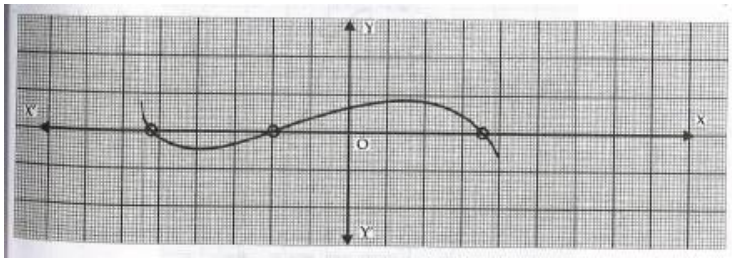
POLYNOMIALS

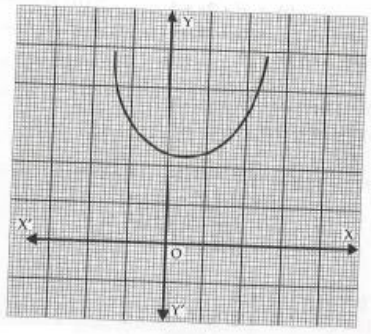
GRAPH OF ZEROS OF POLYNOMIAL

EXERCISE

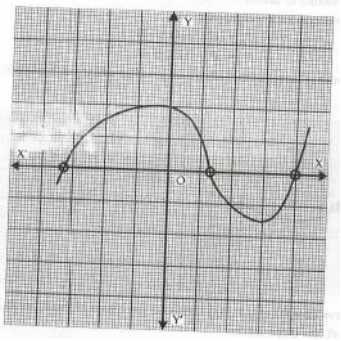
Q.1 Write the number of zeroes of the polynomial $y = f(x)$ whose graph is given in the figure.



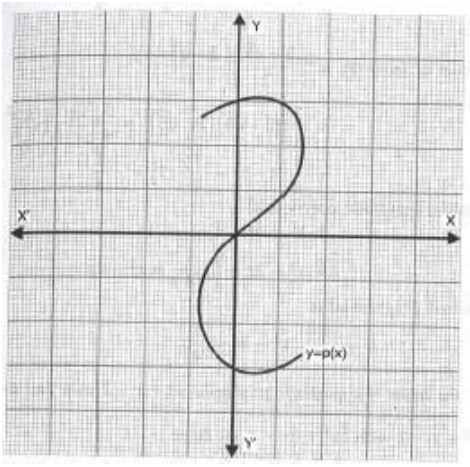
Q.2 The graph of $y = f(x)$ is given in figure. How many zeroes are there of $f(x)$?



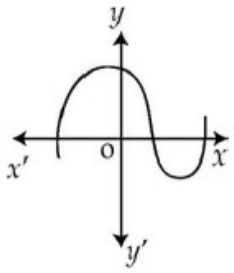
Q.3 The graph of $y = f(x)$ is given in the figure. What is the number of zeroes of $f(x)$?



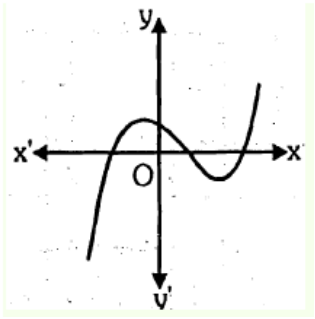
Q.4 What is the number of zeroes of the polynomial y = p(x)?



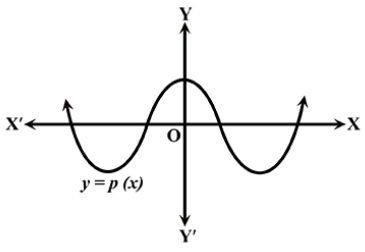
Q.5 The graph of y = p (x) is given below The number of zeroes of p (x) is :



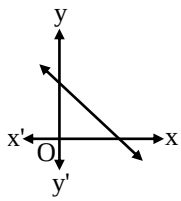
Q.6 Look at the graph given. It is the graph of y = p (x), where p (x) is a polynomial. Find the number of zeros of p (x).

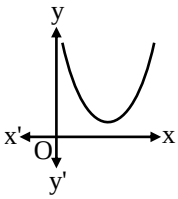


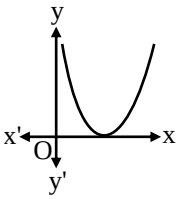
Q.7 From the graph given below, y = p (x) has…….. zeros.

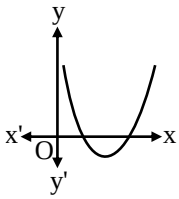


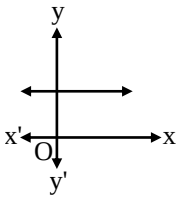
Q.8 Which of the following correspond to the graph to a linear or a quadratic polynomial and find the number of zeroes of polynomial.

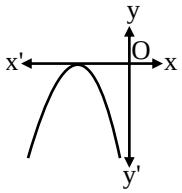
(i) 

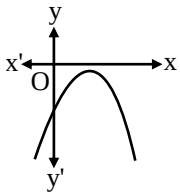
(ii) 

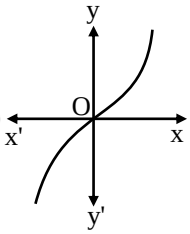
(iii) 

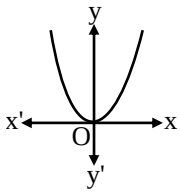
(iv) 

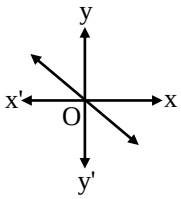
(v) 

(vi) 

(vii) 

(viii) 

(ix) 

(x) 

ANSWER KEY

5. $y = p(x)$ is 3.

6. The graph intersects the X- axis at three points. Thus, the polynomial has three zeros

7. p(x) has 4 zeros

8 (i) The graph is a straight line so the graph is of a linear polynomial. The number of zeroes is one as the graph intersects the x-axis at one point only.

(ii) The graph is a parabola. So, this is the graph of quadratic polynomial. The number of zeroes is zero as the graph does not intersect the x-axis.

(iii) Here the polynomial is quadratic as the graph is a parabola. The number of zeroes is one as the graph intersects the x-axis at one point only (two coincident points).

(iv) Here, the polynomial is quadratic as the graph is a parabola. The number of zeroes is two as the graph intersects the x-axis at two points.

(v) The polynomial is linear as the graph is straight line. The number of zeroes is zero as the graph does not intersect the x-axis.

(vi) The polynomial is quadratic as the graph is a parabola. The number of zeroes is 1 as the graph intersects the x-axis at one point (two coincident points) only.

(vii)The polynomial is quadratic as the graph is a parabola. The number of zeroes is zero, as the graph does not intersect the x-axis.

(viii) Polynomial is neither linear nor quadratic as the graph is neither a straight line nor a parabola is one as the graph intersects the x-axis at one point only.

(ix) Here, the polynomial is quadratic as the graph is a parabola. The number of zeroes is one as the graph intersects the x-axis at one point only (two coincident points).

(x) The polynomial is linear as the graph is a straight line. The number of zeroes is one as the graph intersects the x-axis at only one point.