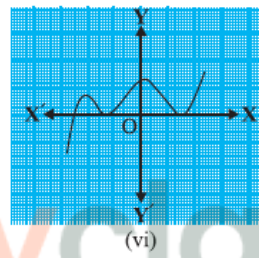
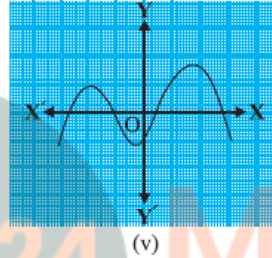
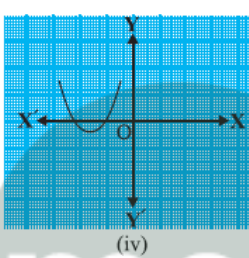
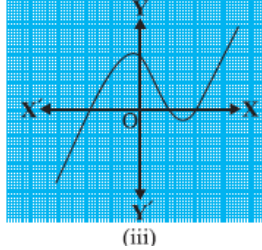
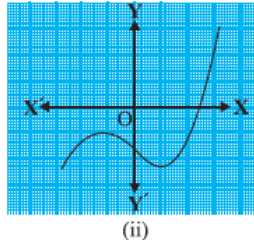
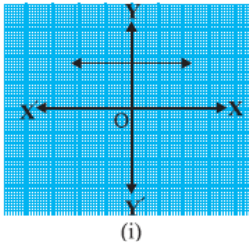


Chapter 2
EXERCISE 2.1

1. The graphs of $y = p(x)$ are given in Fig. 2.10 below, for some polynomials $p(x)$. Find the number of zeroes of $p(x)$, in each case.



Solution:

- (i) The number of zeroes is 0 as the graph does not cut the x-axis at any point
- (ii) The number of zeroes is 1 as the graph intersects the x-axis at only 1 point.
- (iii) The number of zeroes is 3 as the graph intersects the x-axis at 3 points.
- (iv) The number of zeroes is 2 as the graph intersects the x-axis at 2 points.
- (v) The number of zeroes is 4 as the graph intersects the x-axis at 4 points.
- (vi) The number of zeroes is 3 as the graph intersects the x-axis at 3 points.