Polynomials

1. Find the degree of each of the polynomials given below
 (i) x^5 - x^4 + 3   (ii) x^2 + x - 5 (iii) 5
 (iv) 3x^6 + 6y^3 - 7   (v) 4 - y^2 (vi) 5t - v3

2.p(x) = x + 2. Find p(1), p(2), p(-1) and p(-2). Which among 1, 2, -1 and
  -2 becomes the 0 of p(x)?

3.Find zero of the polynomial p(x) = 3x + 12.p(x) = x + 2.

4.If 3 is a zero of the polynomial x2 + 2x - a, then find a5.Find the value of the polynomial 4x^2 - 5x
+ 3, at
(i) x =0   (ii) x = -1
(iii) x = 2   (iv) x =1/2

5.Find the value of the polynomial 4x^2 - 5x + 3, at
(i) x =0   (ii) x = -1
(iii) x = 2   (iv) x =1/2

6.If 2 is a zero of the polynomial p(x) = 2x^2 - 3x+7a,then
find the value of a.

7.If 0 and 1 are the zeroes of the polynomial f (x) = 2x^3-3x^2+ax+b,
then find the values of a and b.

8.Divide 3x^2 + x - 1 by x + 1.

9.Divide the polynomial 2x^4 - 4x^3 - 3x - 1.

9.Divide the polynomial 2x^4 - 4x^3 - 3x - 1.

11.Check whether (x - 2) is a factor of x3 - 2x^2 - 5x

12.If the polynomials ax^3+3x^2-13 and 2x^3-5x + a are divided by
(x-2) leave the same remainder, find the value of a.

13.When a polynomial 2x^3+3x^2+ax+b is divided by (x -2)leaves
remainder 2, and (x + 2) leaves remainder -2.

14.Find the remainder when f(x)=x^4-3x^2 + 4 - 2 and verify the
result by actual division.

15.If the polynomials x^3+ax^2+5 and x^3-2x^2+a are divided by (x + 2) leave the same
remainder, find the value of a.