Exercise 2B

Question 1:

$p(x) = 5 - 4x + 2x^2$

(i) $p(0) = 5 - 4(0) + 2(0)^2 = 5$

(ii) $p(3) = 5 - 4(3) + 2(3)^2$
$= 5 - 12 + 18$
$= 23 - 12 = 11$

(iii) $p(-2) = 5 - 4(-2) + 2(-2)^2$
$= 5 + 8 + 8 = 21$

Question 2:

$p(y) = 4 + 3y - y^2 + 5y^3$

(i) $p(0) = 4 + 3(0) - 0^2 + 5(0)^3$
$= 4 + 0 - 0 + 0 = 4$

(ii) $p(2) = 4 + 3(2) - 2^2 + 5(2)^3$
$= 4 + 6 - 4 + 40$
$= 10 - 4 + 40 = 46$

(iii) $p(-1) = 4 + 3(-1) - (-1)^2 + 5(-1)^3$
$= 4 - 3 - 1 - 5 = -5$

Question 3:

$f(t) = 4t^2 - 3t + 6$

(i) $f(0) = 4(0)^2 - 3(0) + 6$
$= 0 - 0 + 6 = 6$

(ii) $f(4) = 4(4)^2 - 3(4) + 6$
$= 64 - 12 + 6 = 58$

(iii) $f(-5) = 4(-5)^2 - 3(-5) + 6$
$= 100 + 15 + 6 = 121$

********** END **********