Question 1

Put the following in standard form, find the degree and leading coefficient:

$$10a^4 - 8 - 3a^7$$

Question 2

Find the sum of the following polynomials

$$(m^2 - 3m + 4) + (m^2 - 5m - 1)$$

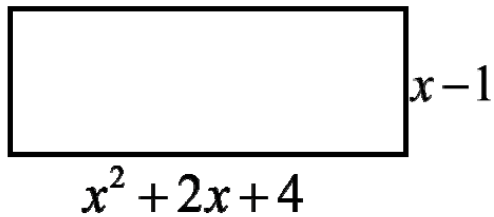### Question 3

Find the difference of the following polynomials

$$(10x^2 + 4x - 5) - (3x^2 + 2x + 1)$$

Question 4

Find the perimeter of the following figure

$x - 1$

$$x^2 + 2x + 4$$

Question 5

Find the product:

$$(x - 2)(3x + 9)$$

Question 6

You learned in Physical Science that

Velocity=Mass x Acceleration. Find the missing value

Mass = $(2x+2)$

Acceleration = (x^2-4x+5)

Velocity= ??

Question 7

Factor the following

$$2x^2+x-3$$

Question 8

Factor out the GCF:

$$16x^5y^3-32x^3y^4+64x^4y^5$$

Question 9

Find the product:

$$(y-2)(y^2-2y+3)$$

Question 10

Factor the following:

$$2x^2+15x+27$$