

Questions:

- | | | | | |
|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 |

Question 1

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

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



Score

$$-3a^7 + 10a^4 - 8 \quad \text{L.C.} = -3, \text{ Deg.} = 7$$

Question 2

Find the sum of the following polynomials

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

Score $2m^2 - 8m + 3$



Question 3

Find the difference of the following polynomials

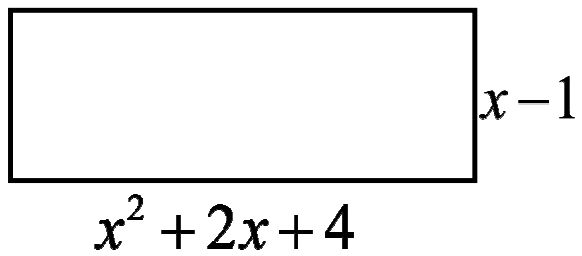
$$(10x^2 + 4x - 5) - (3x^2 + 2x + 1)$$

Score $7x^2 - 2x - 6$



Question 4

Find the perimeter of the following figure



Score



$2x^2 + 6x + 6$

Question 5

Find the product:

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



$$3x^2 + 3x - 18$$
 Score

Question 6

You learned in Physical Science that

Velocity = Mass x Acceleration. Find the missing value

$$\text{Mass} = (2x + 2)$$

$$\text{Acceleration} = (x^2 - 4x + 5)$$

$$\text{Velocity} = ?? \quad 2x^3 - 6x^2 + 2x + 10 \quad \text{Score}$$



Question 7

Factor the following

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



score $(2x + 3)(x - 1)$

Question 8

Factor out the GCF:

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

score $16x^3y^3(x^2 - 2y + 4xy^2)$

Question 9

Find the product:

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

score $y^3 - 4y^2 + 7y - 6$



Question 10

Factor the following:

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



$$(x + 3)(2x + 9) \text{ score}$$