

**6.2: I can demonstrate understanding of operations with polynomials.****Level 1:**

Perform the indicated operation:

1.  $(-3x^4 - x^2 + 2x - 5) + (x^4 - 2x^3 + x^2 + 3x + 7)$

2.  $(2x^2 + 4x - 3) - (x^3 + x + 5)$

3.  $(2x^2 - 3x + 1)(3x - 2)$

4.  $(x + 4)^3$

5.  $(2x + 3)(x - 2)(x + 1)$

6.  $(-5x^4 + 7x^2 - 4x + 3) - (3x^4 - 2x^3 + 6x - 5)$

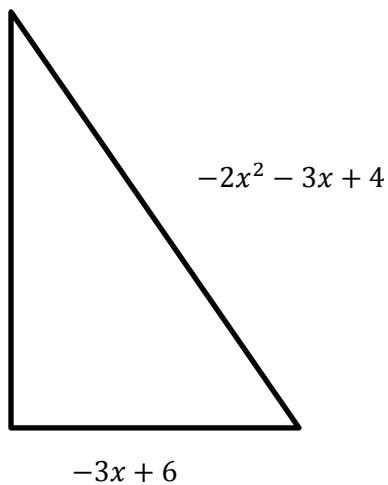
7.  $(2x^3 - 3x^2 + 5x + 1) \div (x - 2)$

8.  $(3x^3 - 4x^2 - 13x - 6) \div (x + 1)$

Level 2-3:

6. Find the missing side length of the perimeter is:

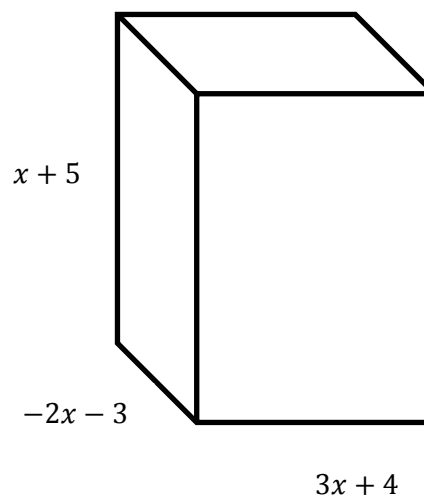
$$P = -x^2 - 6x + 5$$



6. Perimeter: \_\_\_\_\_

7. Find the volume of the rectangular prism:

$$v = l \cdot w \cdot h$$



7. Volume: \_\_\_\_\_