Intermediate Algebra B Name Key

Unit 6.2 Polynomial Operations Re-Teach Hour 1 2 3 4 5

6.2: I can demonstrate understanding of operations with polynomials.

Level 1:

Perform the indicated operation:

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

$-2x^4 - 2x^3 + 5x + 2$

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

$2x^2 + 4x - 3 - x^3 - x - 5$

$-x^3 + 2x^2 + 3x - 8$

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

$6x^3 - 4x^2 - 9x^2 + 6x + 3x - 2$

$6x^3 - 13x^2 + 9x - 2$

4. $(x + 4)^3$

$(x+4)(x+4)(x+4)$

$x^2 + 4x + 4x + 16$

$(x^2 + 8x + 16)(x + 4)$

$x^3 + 4x^2 + 8x^2 + 32x + 16x + 64$

$x^3 + 12x^2 + 48x + 64$

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

$2x^2 - 4x + 3x - 6$

$(2x^2 - x - 6)(x + 1)$

$2x^3 + 2x^2 - x^2 - x - 6x - 6$

$2x^3 + x^2 - 7x - 6$

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

$-5x^4 + 7x^2 - 4x + 3 - 3x^4 + 2x^3 - 6x + 5$

$-8x^4 + 2x^3 + 7x^2 - 10x + 8$

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

2	2	-3	5	1
	↓	4	2	14
	2	1	7	15
	x^2	x	C	R

$2x^2 + 1x + 7 + \frac{15}{x-2}$

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

-1	3	-4	-13	-6
	↓	-3	7	6
	3	-7	-6	0
	x^2	x	C	R

$3x^2 - 7x - 6$

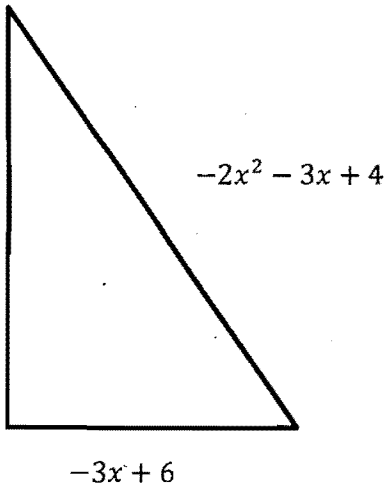
Intermediate Algebra B ***Name*** _____

Unit 6.2 Polynomial Operations Re-Teach ***Hour 1 2 3 4 5***

Level 2-3:

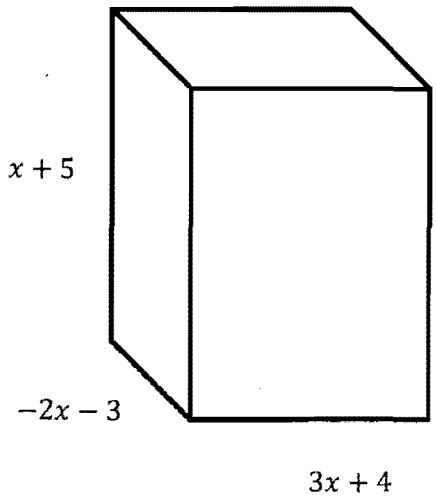
6. Find the missing side length of the perimeter is:

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



7. Find the volume of the rectangular prism:

$v = l \cdot w \cdot h$



6. Perimeter: $x^2 - 5$

7. Volume: $-6x^3 - 47x^2 - 97x - 60$

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

$-2x^2 - 3x - 10x - 15$

$(-2x^2 - 13x - 15)(3x+4)$

$-6x^3 - 8x^2 - 39x^2 - 52x - 45x - 60$

$-6x^3 - 47x^2 - 97x - 60$