Name _____ Period _____

Algebra – Unit 9 Extra Practice

I can add and subtract polynomials.

Original Score

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

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

3. $(3 - 6x^5 - 8x^4) - (-6x^4 - 3x - 8x^5)$

4. $(9x^3 + 5x^2 + 11x) + (-2x^3 + 9x - 8x^2)$

5. $(4x^2 + 7x^3) - (-6x^2 - 7x^3 - 4x) - (10x + 9x^2)$

6. $3x(8x + x^2 - 6) - 2x^2(-10x + 7 - 2x^2)$

Name _____ Period _____

Algebra – Unit 9 Extra Practice

I can multiply and combine polynomial expressions.

Original Score

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

2. $(2x+2)(6x+1)$

3. $(8x-2)(6x+2)$

4. $(4x-1)^2$

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

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

Name _____ Period _____

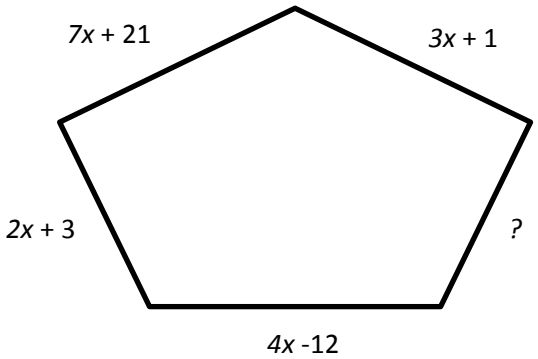
Algebra – Unit 9 Extra Practice

I can apply polynomial operations to context problems.

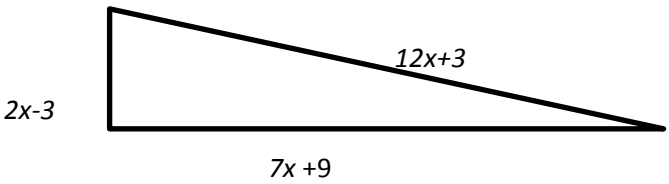
Original Score

Be sure to define your variables, write an equation, and write your answer in a complete sentence.

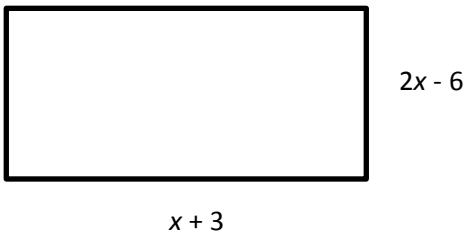
1. The perimeter of the figure below is $18x + 24$. Find the missing side length.



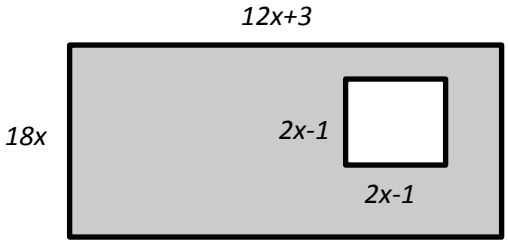
2. Find the area of the triangle below. (REMINDER: To find the area of a triangle, take HALF of the result of length times width.)



3. Find the AREA and PERIMETER for the rectangle below.



4. Find the area of the shaded region in the shape below.



Name _____ Period _____

Algebra – Unit 9 Extra Practice

I can apply rules of exponents to simplify polynomial expressions.

Original Score

1. $(4x^2y)^2$

2. $(5x^3y^{-2})(7x^{-4}y^3)$

3. $\frac{39x^5y^{-14}z^3}{13x^3y^{-8}z^3}$

4. $\frac{xy^{-8}}{x^3y^6} \cdot \frac{x^3}{x^{-7}y^4}$

5. $(\frac{x^3y^5}{x^{-7}y^7})^{-3}$

6. $(4x^5y)^3(3xy^3)$