

Algebra 1- Week 15 Homework

**Monday-** EOC Practice / Finish Tests

**Tuesday-**

1)  $a^7 \cdot a^{12} =$

2)  $(7q^5)(12q^3r^5) =$

3)  $(x^2)^3 =$

4)  $\frac{10^6}{10^2} =$

5)  $\left(\frac{x}{y}\right)^6 =$

6)  $\left(\frac{2d^4}{4e}\right)^3 =$

**Wednesday-**

*Simplify each expression below using the properties of exponents. Your answer should only contain positive exponents.*

<p>1. <math>\left(\frac{4c^{-5}}{8d^0}\right)^3</math></p>	<p>2. <math>(2^0 \cdot x^{-3})^4</math></p>
<p>3. <math>6x^4x^{-10}</math></p>	<p>4. <math>\frac{a^{12}b^{-3}}{a^5b^5}</math></p>

**Thursday-**

1)  $(4m^2 - 3m + 10) + (m^2 + m - 2)$

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

3)

**BUSINESS** The polynomial  $s^3 - 70s^2 + 1500s - 10,800$  models the profit a company makes on selling an item at a price  $s$ . A second item sold at the same price brings in a profit of  $s^3 - 30s^2 + 450s - 5000$ . Write a polynomial that expresses the total profit from the sale of both items.

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Block: \_\_\_\_\_

**Friday-**

1. Solve each problem below.

a. Find the sum:  $(2x + 5) + (x + 3)$

b. Find the product:  $(2x + 5) \cdot (x + 3)$

c. Compare and contrast your solutions to the two problems above. Sketch Algebra tiles to support your response.

2. Find the area of the rectangle below:

