

Name: \_\_\_\_\_

**Homework (WEEK 8) HONORS**

**TRY YOUR BEST AND SHOW ALL OF YOUR WORK! Use CUBES (circle, underline, box, evaluate, and solve) to earn full credit.**

**TUESDAY:**

**Directions:** Solve the following problems. You MUST show your work. **NO WORK = NO CREDIT.**

<p>1. Simplify the following expressions: <math>-2(4 + 3.2) - y + 3^2 + 5y</math></p> <p>Answer _____</p> <p>2. <math>9xy - 2x + y + x - xy + 4x</math></p> <p>Answer _____</p>	<p>4. Evaluate the following if <math>g = 6</math>, <math>m = 2</math>, and <math>d = 8</math>.</p> <p>a. <math>gm^3 + 2d</math> = _____</p> <p>b. <math>md + 4(g + 4)</math> = _____ <math>m^3</math></p> <p>c. <math>12d - gm</math> = _____</p>
<p>3. Which property was used to simplify this expression? <math>3y + 42x + 7y - 5x</math> <math>3y + 7y + 42x - 5x</math> <math>10y + 37x</math></p> <p>Answer: _____</p>	<p>5. Write the expression described by the phrase. (use a variable for "number")</p> <p>a. Seven minus a number _____</p> <p>b. Six more than a number _____</p> <p>c. Twice a number increased by four _____</p> <p>d. Eight less than a number _____</p>

**WEDNESDAY:**

**Directions:** Solve the following problems. You MUST show your work. **NO WORK = NO CREDIT.**

<p>1. Use the distributive property to produce an equivalent expression for:</p> $-4(x^2 + xy) + 3(x + x^2) - x - 5x^2$ <p>Answer _____</p> <p>2. <math>11m + 6(m + mn) - 2mn + 3(n + 4)</math></p> <p>Answer _____</p>	<p>4. The expression <math>24c + 18</math> can represent the area of the figure below. Using the distributive property find the width and then use the distributive property to find the length.</p> <table border="1" data-bbox="941 1480 1388 1648"><tr><td style="text-align: center; width: 100px; height: 80px;"><math>24c</math></td><td style="text-align: center; width: 100px; height: 80px;"><math>18</math></td></tr></table> <p>Answer _____</p>	$24c$	$18$
$24c$	$18$		
<p>3. Evaluate the expression <math>3x + 2y</math> when <math>x = 6</math> and <math>y = 2.5</math></p>	<p>5. Evaluate the following when <math>x = 3</math> and <math>y = 2</math>.</p> $(x^3 - y^4) + y(x^0 \cdot 12)$		

$$5^2 + x \cdot 3 + 1$$

Answer \_\_\_\_\_

Answer \_\_\_\_\_

**THURSDAY:**

**Directions:** Solve the following problems. You **MUST** show your work. **NO WORK = NO CREDIT:**

1. Use the distributive property to produce an equivalent expression for:

$$7a(2a + 3) + 5(a^2 - 2a)$$

Answer: \_\_\_\_\_

3. Write an algebraic expression that represents 12 less than the product of 8 times a number squared.

Answer \_\_\_\_\_

4. Evaluate  $(2/3)^3 =$  \_\_\_\_\_

2.  $7a + 2$  (You can NOT say 7a plus 2. Think of another way to translate this expression)

Answer:  
\_\_\_\_\_

5. Combine like terms to simplify the following:

$$10(w + 1/4) - 12 + 3(w - 8)$$

Answer

**MONDAY/WEDNESDAY:**

Solve the following problems **without a calculator**. You **MUST** show your work. **NO WORK = NO CREDIT.**

1. Simplify the following expression:

$$20w - 4x + 3w - 8 + 42x \div 7$$

Answer \_\_\_\_\_

2. Use the distributive property to produce an equivalent expression for

$$21x \div 3 + 6(3 - x) + 7^0$$

Answer \_\_\_\_\_

5. Simplify the following expressions.

$$12r + 6(4r - 3) + 5^2 - 9r^2$$

Answer \_\_\_\_\_

6.  $6(4x - 2) - 9x + 4^2$

Answer \_\_\_\_\_

3. Evaluate:

$$6xy \text{ when } x = 3.7 \text{ and } y = 11$$

Answer \_\_\_\_\_

4.  $\frac{x^2 - 2y + 3(z-1)}{y}$  when  $x = 6$ ,  $y = 12$  and  $z = 5$

Answer \_\_\_\_\_

7. Write the following algebraic expressions in word form.

$$8(2z - 4)$$

\_\_\_\_\_

8.  $5y + 4$  (You can NOT say 5y plus 4. Think of another way to translate this expression)

\_\_\_\_\_

