

Name: _____

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Homework (WEEK 7) Honors:

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

MONDAY:

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

<p>1. Write an algebraic expression for the following:</p> <p>a. Twice a number decreased by 8 _____</p> <p>b. The sum of 5 and a number increased by 6 _____</p> <p>c. A number squared more than 4 _____</p> <p>d. 8 less than a number of elephants _____</p>	<p>2. What is the value of:</p> <p>a) $0.4^3 =$ _____</p> <p>b) $5 + 2^4 \cdot 6 \div 6 =$ _____</p> <p>c) $6^2 + 25x \div 5 \cdot 2 + 6.78^0 \cdot x$ _____ If $x=3$</p>
<p>3. A rectangle has a length of $3x$ and a width of $x + 4$. The rectangle's perimeter is: _____</p> <p>The rectangle's area is: _____</p> <p>A square has a side length of $6y^2$. What is the perimeter of the square? _____</p>	<p>4. Underline key words and write an algebraic expression for the following phrases:</p> <p>a. fourteen decreased by a number p _____</p> <p>b. the product of a number and 6 _____</p> <p>c. nine more than the number of math assignments _____</p>

TUESDAY:

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

<p>1. $5y + 4$ (You can NOT say 5y plus 4. Think of another way to translate this expression)</p> <p>_____</p> <p>_____</p>	<p>2. Write an algebraic expression to represent the following:</p> <p>a) The sum of a number and the quantity two times a number minus one. _____</p> <p>b) Seven divided by the sum of a number plus 2. _____</p> <p>c) The quantity six plus a number divided by two. _____</p> <p>d) Triple the difference between a number and 7. _____</p>
<p>3. Write a mathematical story for the following equation. $15b = 180$</p> <p>_____</p> <p>_____</p>	<p>3. Solve.</p> <p>$(6 \cdot 4 \div 3)^2 - (2^4 - 5 \cdot 2)$</p> <p>Answer _____</p>

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WEDNESDAY:

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

<p>1. Solve the equation for x. a) $3x + 10 = 15$ $x =$ _____ b) $4x - 8 = 8$ $x =$ _____ c) $5x + 1 = 16$ $x =$ _____</p>	<p>2. Evaluate the expression $3x^2 + 2y \div 2$ when x is equal to 4 and y is equal to 2.4. Answer: _____ 3. Evaluate $5(n^2 + 3) - 7n$, when $n = \frac{1}{4}$ Answer: _____</p>
<p>3. Evaluate the following expression when $x = \frac{1}{2}$ and $y = 3$ $\frac{x^2 + y^3}{3}$ Answer: _____ 4. $\frac{x^2 - 2y + 3(z-1)}{y}$ when $x = 6$, $y = 12$ and $z = 5$ Answer _____</p>	<p>5. Given that the width is 6 units and the length can be represented by $x^2 + 6$, what is the area of the flowers below? $\begin{array}{cc} & x^2 & 6 \\ \hline & \square & \square \\ \hline & 6 & \end{array}$ Answer: _____</p>

THURSDAY:

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

<p>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 _____</p>	<p>5. Simplify the following expressions. $12r + 6(4r - 3) + 5^2 - 9r^2$ Answer _____ 6. $6(4x - 2) - 9x + 4^2$ Answer _____</p>
<p>3. Evaluate: $6xy$ when $x = 3.7$ and $y = 11$ Answer _____</p>	<p>7. Write the following algebraic expressions in word form. $8(2z - 4)$ _____</p>

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