### Station Review for Ch. 5 Test (Algebraic Expressions)

Name		
Block	Date	

Station	1	_ '	Vocabulary
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\*Study (Read through the defintions and examples in the folder)

\*If false, how can you make it true?

\_\_\_\_1) In the expression 6x + 3 + 4x + -7 the pair of terms 6x and 4x are called like terms.

\_\_\_\_2) 9 + x = x + 9 is called the associative property.

\_\_\_\_3) (a + 2) + 0 = a + 2 is an example of the identity property of addition.

\_\_\_\_4) In the expression 7x + 2, 7 is called a constant.

\_\_\_\_5) In the expression 8x - 2 + 7x + 9 the pair of terms -2 and 9 are called like terms.

\_\_\_\_6) 2(9) = 9(2) is an example of the commutative property.

\_\_\_\_7) The expression 7x - 2y + 8 + x has 4 terms.

\_\_\_\_8) The identity property of multiplication says that 8(0) = 0

\_\_\_\_9) The distributive property says that 9(x + 2) = 9x + 2

 $_{10}$ ) -x has an invisibe coefficient of -1

#### Station 2 - Distributive Property for Mental Math

\* Study the examples in the folder

\* Show clearly how to do these problems using distributive property.

 Shawn buys 6 packs of gum. Each pack costs \$1.07 Find the total cost.

2)  $4(6\frac{1}{2})$ 

3) 8(2.30)

<sup>\*</sup>Decide if each statement is True (T) or False(F)

## Station 3 - GCF and Factoring and Sequences

Read and Study the examples in the folder:

7) 12, 15, 18, \_\_\_\_, \_\_\_

Find the GCF of each of the following:

- 1) 4x and 6xy
- 2) ab and 2a \_\_\_\_\_
- 3) 18b<sup>2</sup>c and 6abc \_\_\_\_\_

Factor each of these completely.

- 4) 10ab 4a²b \_\_\_\_\_
- 5) 5x + 10y \_\_\_\_\_
- 6) 9x<sup>2</sup> 3x \_\_\_\_\_

- B) Find the next two terms.
- 8) If the pattern continues, what algebraic expression can be used to find the plant's height after n months and after 1000 months.

A) State the rule for this pattern.

Month	Height(in)
1	5
2	10
3	15
n	
1000	

#### <u>Station 4</u> - Evaluate expressions

Read and Study the examples on the folder. Then try these examples.

Evaluate each of these expressions IF a = -10

$$b = 4$$

c = -3

1) b<sup>2</sup> - 3a

2) ac - b

3) c - a + b

Solve these problems in TWO different ways. Start work with the orginal problem.

$$5) -8(-3 + 5)$$

Order of Operations | Distributive Property

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## Station # 5 - Simplify Expressions

Study the examples in the folder. Then try these problems.

Simplify each expression using steps discussed in class.

1) 
$$-3(5x - 4)$$

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 2)  $2(x - 7) - 4(-3x + 2)$  3)  $10 - (4x - 3)$ 

4) 
$$-6x - 4y - x + 8 + y$$

# Station # 6 - Algebraic Expressions from Words and Pictures

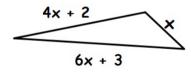
Study the examples in the folder. Then try these examples.

1)	Find	the	perimeter
-,	1 1110	1116	per interer

	-6x + 5
-2x	

3) A taxi charges \$4 and then \$2 for each additional mile. Write a simplified algebraic expression for the total cost of a ride that is m miles.

2) Find the perimeter.



4) Tom buys 12 pencils that  $cost \times dollars$  each and 4 pens tha cost y dollars each. Write a simplified algebraic expression for the total cost of the pencils and pens.