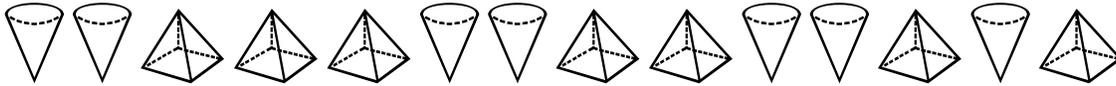


Name _____ Date _____ Period _____

1. Use the model expression to answer the following questions. Write an expression for the model. Use 'c' for the cone and 'p' for pyramid.



2. Create a model for the following expression: $-2x + 3x + 5$

3. Ziva wrote the following number puzzle: Pick a number, add 5, and triple the result.
She then wrote: Pick a number, triple it, and add 5 to the result.

Write an expression for each number puzzle. Are these two expressions equivalent? Explain.

4. $2y^2 + 7y^2$ is equivalent to $9y^2$. These expressions are called *like terms*.

a. Why are $2y^2$ and $7y$ called *unlike terms*? Explain.

c. Are $5a^2$ and $5b^2$ like terms? Explain.

b. Are $4xy$ and $7xy$ like terms? Explain.

d. Are $12n^2$ and $12n$ like terms? Explain.

5. Describe the expression using all of the following words: variable, constant, term, and coefficient.

$$2x + 9$$

Variable: _____

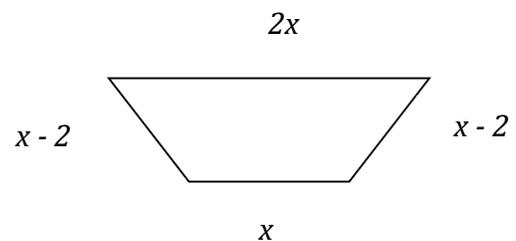
Term: _____

Constant: _____

Coefficient: _____

6. Select all of the expressions that could be used to find the perimeter of the given figure.

- a) $2x + x - 2 + x + x - 2$
- b) $5x - 2$
- c) $2(x - 2) + 3x$
- d) $5x - 4$
- e) $5(x - 4)$
- f) $3x + 2x - 2$



7. Evaluate $2x + 3y$ where $x = 4$ and $y = 2.5$

8. Sam is 3 years older than his sister Lucy and twice as old as his cousin Ayush. Write and evaluate an expression for the Lucy's age if Ayush is 4 years old.

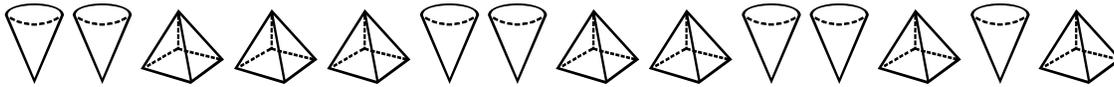
Name _____

Date _____

Period _____

ANSWER KEY

1. Use the model expression to answer the following questions. Write an expression for the model. Use 'c' for the cone and 'p' for pyramid.



$$2c + 3p + 2c + 2p + 2c + p + c + p$$

2. Create a model for the following expression: $-2x + 3x + 5$

$$-x -x + x + x + x + 5$$

The students could also draw pictures to represent the variables.

3. Ziva wrote the following number puzzle: Pick a number, add 5, and triple the result. She then wrote: Pick a number, triple it, and add 5 to the result.

Write an expression for each number puzzle. Are these two expressions equivalent? Explain.

$$(n + 5) \cdot 3$$

$$n \cdot 3 + 5$$

These two expressions are not equivalent. For example, if we choose the number "2", then the first expression would equal 21 and the second expression would equal 11.

Pre-Assessment

4. $2y^2 + 7y^2$ is equivalent to $9y^2$. These expressions are called *like terms*.

e. Why are $2y^2$ and $7y$ called *unlike terms*? Explain.

The first expression squares the variable. The second one does not.

g. Are $5a^2$ and $5b^2$ like terms? Explain.

NO. The variables are different.

f. Are $4xy$ and $7xy$ like terms? Explain.

YES. Both contain xy .

h. Are $12n^2$ and $12n$ like terms? Explain.

NO. The variables do not have the same power.

5. Describe the expression using all of the following words: variable, constant, term, coefficient.

$$2x + 9$$

Variable: x

Term: 2x, 9

Constant: 9

Coefficient: 2

6. Select all of the expressions that could be used to find the perimeter of the given figure.

g) $2x + x - 2 + x + x - 2$

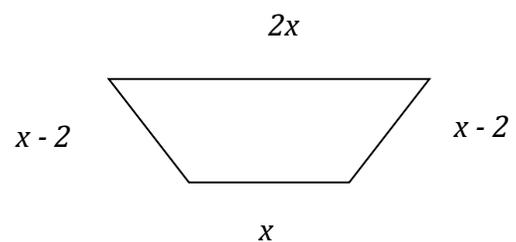
h) $5x - 2$

i) $2(x - 2) + 3x$

j) $5x - 4$

k) $5(x - 4)$

l) $3x + 2x - 2$



7. Evaluate $2x + 3y$ where $x = 4$ and $y = 2.5$

15.5

8. Sam is 3 years older than his sister Lucy and twice as old as his cousin Ayush. Write and evaluate an expression for the Lucy's age if Ayush is 4 years old.

Sam = Twice Ayush's age, $2a$. Lucy = Three years younger than Sam, $2a - 3$

Ayush = 4 So Lucy is $2(4) - 3$, which means that Lucy is 5 years old.

Student Name: _____

Date: _____

Assessment: Pre-Test 7.EE.1

Teacher: _____

Data:

Student's overall score on assessment: _____ Assessment will be retaken. Yes No

Feedback: Correct questions are circled. Missed questions are left blank.

Writing expressions	1	2	3		
Identify parts of an expression	4a	4b	4c	4d	5
Identify equivalent expressions	6				
Evaluate expressions for particular values	7	8			

Strategy:

I did very well on

I need to go back and work on...