

Name: _____

Date: _____

Teacher: _____

Period: _____

Algebra Tiles Set #1:

3 small blue rectangles, 2 small red rectangles,

1 medium blue rectangles,

3 medium red rectangles,

4 large blue rectangles, 2 large red rectangles

Algebraic Expression #1

Algebra Tiles Set #2:

1 small blue rectangle, 0 small red rectangles,

2 medium blue rectangles,

4 medium red rectangles,

3 large blue rectangles, 1 large red rectangle

Algebraic Expression #2

Combine Set #1 + Set #2

Algebraic Expression for #1 + #2

 $= 1$  $= 1x$  $= 1y$  $= -1$  $= -1x$  $= -1y$

1. Label the parts of the expressions using the following vocabulary terms:

Variable Constant Coefficient

a. $-4x + 8 - 2xy$

b. $\frac{1}{5}y - 8 + 2x - 6z$

c. $7 - 2y + 3.7x$

2. How many **terms** are in the following expressions?

a. $24x + 7y - 2 + 74x$ _____

b. $5.5x^2 - 7.9x + 65.21$ _____

3. List the **coefficients** in the following equations:

a. $-2x + 5 = -7x$ _____

b. $35 - 8y = \frac{1}{5}y - 9$ _____

Name: Key

Date: _____

Teacher: _____

Period: _____

Algebra Tiles Set #1:

3 small blue rectangles, 2 small red rectangles,

1 medium blue rectangles,

3 medium red rectangles, →4 large blue rectangles, 2 large red rectangles

Algebraic Expression #1

$$3 + 1x + 4y + -2 + -3x + -2y$$

$$3 + -2 + 1x + -3x + 4y + -2y$$

$$1 + -2x + 2y$$

Algebra Tiles Set #2:

1 small blue rectangle, 0 small red rectangles,

2 medium blue rectangles,

4 medium red rectangles, →3 large blue rectangles, 1 large red rectangle

Algebraic Expression #2

$$1 + 2x + 3y + -4x + -1y$$

$$1 + 2x + -4x + 3y + -1y$$

$$1 + -2x + 2y$$

Combine Set #1 + Set #2

4 small blue 2 small red

3 med. blue 7 med. red

7 large blue 3 large red

$$4 + -2 + 3x + -7x + 7y + 3y$$

$$2 + -4x + 4y$$

Algebraic Expression for #1 + #2

$$(1 + -2x + 2y) + (1 + -2x + 2y)$$

$$1 + 1 + -2x + -2x + 2y + 2y$$

$$2 + -4x + 4y$$



= 1



= 1x



= 1y



= -1

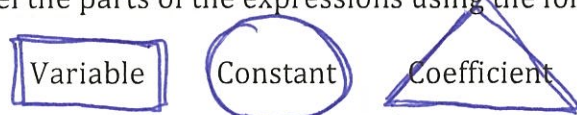


= -1x



= -1y

1. Label the parts of the expressions using the following vocabulary terms:



Variables have  around them
 Constants have  around them
 Coefficients have  around them

a. $-4x + 8 + 2xy$

Coefficients: $-4, -2$

b. $\frac{1}{5}y - 8 + 2x - 6z$

$\frac{1}{5}y + (-8) + 2x + (-6z)$

Coefficients: $\frac{1}{5}, 2, -6$

c. $7 - 2y + 3.7x$

$(7) + (-2y) + (3.7x)$

Coefficients: $-2, 3.7$

2. How many **terms** are in the following expressions?

a. $24x + 7y - 2 + 74x$ 4

b. $5.5x^2 - 7.9x + 65.21$ 3

3. List the **coefficients** in the following equations:

a. $-2x + 5 = -7x$ $-2, -7$

b. $35 - 8y = \frac{1}{5}y - 9$ $-8, \frac{1}{5}$
 $35 + -8y = \frac{1}{5}y + -9$