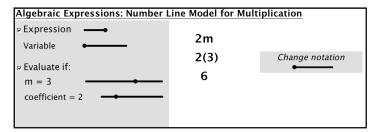
Name:		
Class/Block:	Date:	

## **Exploration: Algebraic Expressions with Number Line Model**

### **Getting Started:**

In your browser, go to the *Algebraic Expressions – Number Line Model for Multiplication* applet.

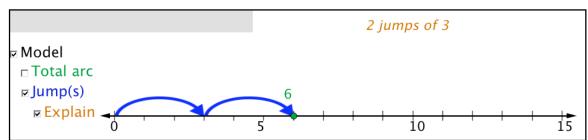
- Check the *Expression* checkbox to see the expression.
- Move the slider next to the *Expression* checkbox to see a coefficient multiplied by a variable..
- Move the *Variable* slider to change the variable name.



### Part I.

Explore the Number Line Model for Multiplication

- Check the *Model* checkbox to see the expression represented on a number line.
- Check the *Explain* checkbox to see an explanation of the model with the value and coefficient selected.



The example above represents the expression 2m when the variable m = 3 and the coefficient is 2.

#### Part II.

Predict what the number line model will look like with the following values for m and the coefficient:

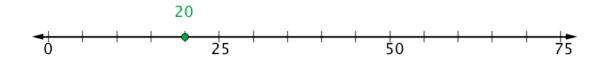
a) coefficient = 
$$4$$
 and m= $3$  4(3)





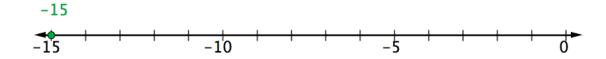
Name: \_\_\_\_\_ Date: \_\_\_\_\_

b) **coefficient = 4** and **m=5** 



4(5)

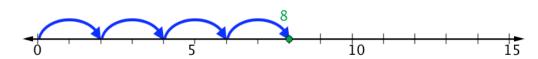
c) coefficient = 5 and m= -3 5(-3)



# Part III.

Give the expression for the model provided

1.



2. \_\_\_\_\_

$$-75$$
  $-50$   $-25$   $0$