

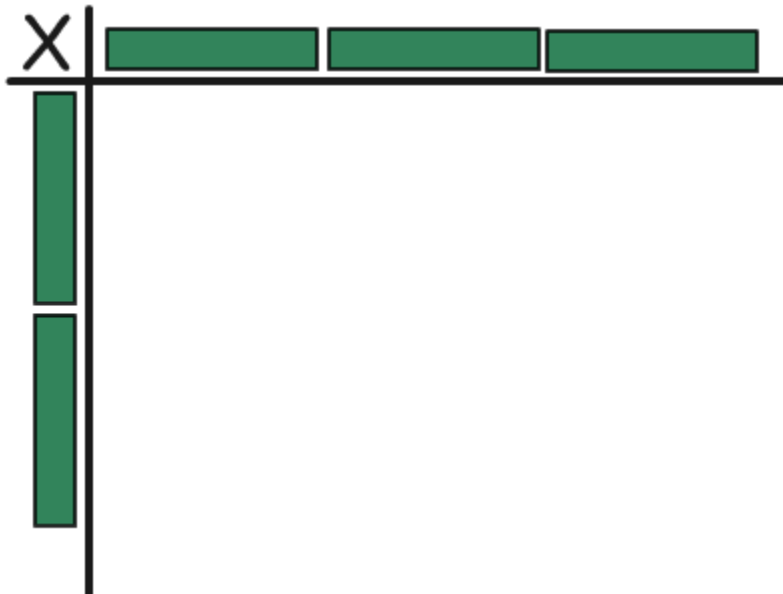
NAME: _____

DATE: _____

Multiplying Monomials by Monomials

1. In your own words, describe the method for using alge-tiles to multiply to monomials.

2. Use the following alge-tile representation for the questions below.



- a. Identify the expression of multiplication.
- b. Draw in the rectangle that “completes the area” on the diagram.
- c. Draw in the alge-tiles that complete the area on the diagram.
- d. Algebraically write your product.

3. Write the multiplication expression and the product for the following:

$$\begin{array}{r} \times \quad \color{blue}{\boxed{}} \\ \hline \boxed{} \\ \boxed{} \\ \hline \end{array}$$

$$\begin{array}{r} \times \quad \boxed{} \\ \hline \boxed{} \\ \hline \end{array}$$

$$\begin{array}{r} \times \quad \boxed{} \\ \hline \color{green}{\boxed{}} \\ \color{green}{\boxed{}} \\ \color{green}{\boxed{}} \\ \hline \end{array}$$

4. Using alge-tiles (either online/virtual alge-tiles or physical alge-tiles), model each of the following, including the product. Snap a picture or screenshot and call me over once you're done.

a. $(3x)(2x)$

b. $(2y)(-x)$

c. $(5x)(3x)$

d. $(-2x)(-2x)$

5. Find the product.

a. $(2c)(8b)$

g. $(3y^3)(-2y^2)$

b. $(3v)(-5v)$

h. $(x^2y)(xy)$

c. $(6x)(16x)$

i. $(abc)(abc)$

d. $(x^2)(x)$

j. $(-3x^2y^3z^4)(2x^2yz^3)$

e. $(x)(x^2)$

k. $(3m^2n^3q)(-4n^3p^2q^4)$

f. $(m^3)(m^4)$

l. $(xy)(2x^2y)(3x^3y^4)$

6. When you multiply two monomials, how many terms will there be in your product?

7. Write down three monomials below.

a. Monomial 1: _____

b. Monomial 2: _____

c. Monomial 3: _____

8. Multiply Monomial 1 by Monomial 2.

9. Multiply Monomial 2 by Monomial 3.

10. Multiply Monomial 3 by Monomial 1.

11. Multiply all the products from questions 8 – 10.

12. Find a classmate. Multiply the product from question 11 with your classmate's product from question 11.