



MATH NEWS



LAFAYETTE
PARISH SCHOOL SYSTEM

Grade 6, Module 4, Topic C

6th Grade Math

Module 4: Expressions and Equations

Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. In Module 4, Topic C of Eureka Math (Engage New York), students begin substituting or replacing letters with numbers and numbers with letters in order to evaluate expressions. They continue to work and practice with exponents. Volume and area are used as real world examples.

Focus Area Topic C:

Replacing Letters and Numbers

Words to Know:

Exponent notation- For any number a , we define a^m to be the product of m factors of a . For example, a^m means $a \cdot a \cdot a \cdot \dots \cdot a$, m times

Base – In the exponent notation, a^m , a is the base.

Exponent- In the exponent notation a^m , m is the exponent

Squared – a number that is raised to the second power. (i.e., 5^2 , we read this number 5 squared)

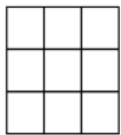
Cubed – a number raised to the third power. (i.e., 5^3 , we read this number as 5 cubed)

Variable– a letter that stands for an unknown number



Replacing letters with numbers:

Example and Solution:



What is the length of one side of this square? 3 units
What is the formula for the area of a square? $A = s^2$
What is the square's area as a multiplication expression?

3 units x 3 units.

What is the square's area? Solution: 9 square units

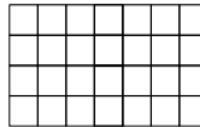
Focus Area Topic C:

Replacing Letters with Numbers

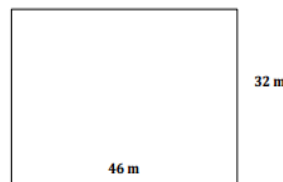
Remember to find the area of a rectangle we multiply the length times the width just as in a square (special rectangle) except the side lengths are not the same.

$$A = l \times w$$

If we do not know the units we are measuring we simply use the word unit or square units.



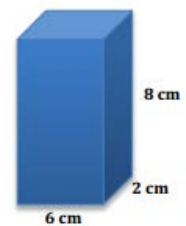
Fill in the chart below using these figures.



Length of Rectangle	Width of Rectangle	Rectangle's Area Written as an Expression	Rectangle's Area Written as a Number
7 units	4 units	7 units x 4 units	28 square units
46 m	32 m	46 m x 32 m	1,472 m ²

Volume:

To find the volume of a right rectangular prism we multiply the length (l) times the width (w) times the height (h).



What does the l represent in the first figure? The length
What does the h represent in the first figure? The height
What does the w represent in the first figure? The width
The formula to find the volume of a right rectangular prism is $V = l \times w \times h$

$$V = 6\text{cm} \times 2\text{cm} \times 8\text{cm}$$

$$V = 96 \text{ cm}^3$$