

Lesson Summary

VARIABLE (description): A *variable* is a symbol (such as a letter) that is a placeholder for a number.

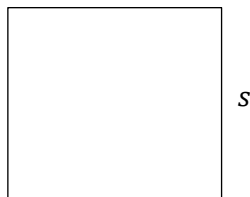
EXPRESSION (description): An *expression* is a numerical expression, or it is the result of replacing some (or all) of the numbers in a numerical expression with variables.

There are two ways to build expressions:

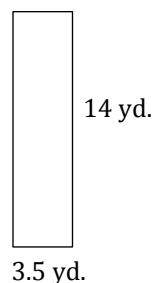
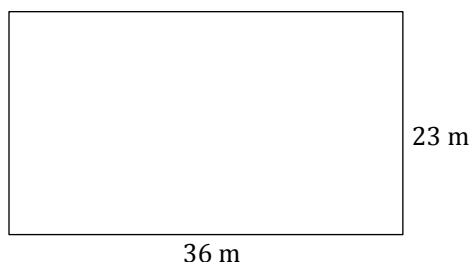
1. We can start out with a numerical expression, like $\frac{1}{3} \cdot (2 + 4) + 7$, and replace some of the numbers with letters to get $\frac{1}{3} \cdot (x + y) + z$.
2. We can build such expressions from scratch, as in $x + x(y - z)$, and note that if numbers were placed in the expression for the variables x , y , and z , the result would be a numerical expression.

Problem Set

1. Replace the side length of this square with 4 in., and find the area.



2. Complete the table for each of the given figures.



Length of Rectangle	Width of Rectangle	Rectangle's Area Written as an Expression	Rectangle's Area Written as a Number

3. Find the perimeter of each quadrilateral in Problems 1 and 2.
4. Using the formula $V = l \times w \times h$, find the volume of a right rectangular prism when the length of the prism is 45 cm, the width is 12 cm, and the height is 10 cm.