

Chapter 3 section 1
Mathematical Expressions

English words into a mathematical expression.

Variable: symbol that stands for a value that may vary.

Mathematical Expression: Combination of numbers, and variables using the operations of addition, subtraction, multiplication, division, exponents.

Example:

$$2a \quad x + 5 \quad y^2$$

Expression must be valid, well-formed and balanced

Not valid:

$$2 \div 5x \quad 2 + 3(2$$

Translate words to mathematical expression

Add Sub mult divide

12 larger than x

11 less than y

x decreased by 9

Example 2: page 173

Let W represent the width of the rectangle. the length of a rectangle is 4 feet longer than its width.

Express the length of the rectangle in terms of its width, W.

Example 3:

A string measures 15 inches is cut into two pieces. Let x represent the length of one of the resulting pieces. Express the length of the second piece in terms of the length, x, of the first piece.