

Math8 Lesson 10.0

Thursday, March 16, 2017 3:31 PM



10.0

Date: _____

10.0 Notes. Translating English to Algebra

Review:

How is an equation different from an expression?

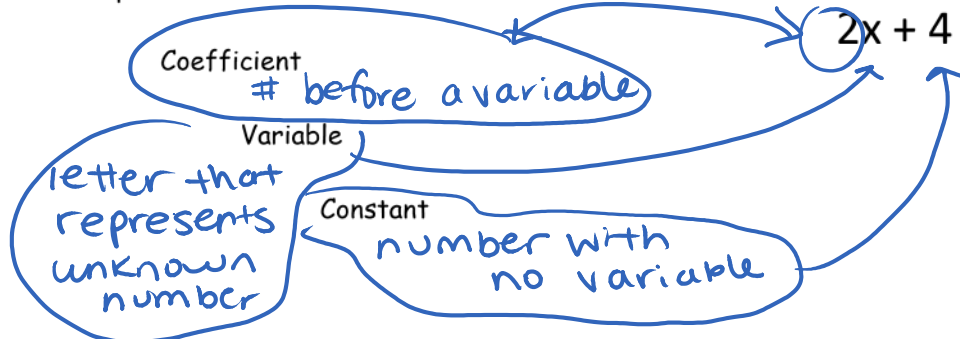
Equation has "=" sign.

Examples:

Expression: $3x + 1$

Equation: $4x + 1 = 3$

Important Terms



Identify the coefficient, variable and constant in each expression:

$3x - 2$
↑ coeff. ↑ var. ← const.

$-x + 1$
← const.
↑ var.
↑ coeff.

$5 - 2x$
← const.
↑ coeff. ↑ var.

$x - 1$
← const.
↑ var.
↑ coeff.
 $x = 1x$

Sometimes you will see an expression described using words, and you will need to find out how to convert them to algebra. Some problems are simple:

Jerry has \$10 and you have 3 dollars more than Jerry. How much do you have?

$y = \$\$ \text{ you have}$
 $y = 3 + J$
 $y = 3 + 10$

Anna is twice as tall as the height of the chair. If the chair is 64 cm high, how tall is Anna?

$n = \text{anna}$
 $c = \text{chair}$
 $n = 2c$

Instead of getting an answer, sometimes you will need to write an expression using a variable.

Avery has \$4 more than Tom. Write an expression to show how much Avery has.

$$\begin{array}{l} a = \text{avery} \\ t = \text{tom} \end{array} \quad a = \underbrace{t + 4}$$

1. Declare a variable
2. Use keywords to help identify how your quantity compares to your variable

What are some phrases that might mean:

<p>Adding <i>and</i> plus more than earns/makes/gains go up sum increase</p>	<p>Subtracting take away less than decrease difference lose debt go down</p>
<p>Multiplying doubles twice three times .. of product</p>	<p>Dividing quotient split/share half of (fraction)</p>
<p>Equals same as equal to as much as</p>	