Multiplying and Dividing Real Numbers Video Lecture

Section 1.7

Course Learning Objective:

- 1) Simplify numerical expressions.
- 2) Translate words into algebraic expressions.

Weekly Learning Objectives:

- 1) Multiply and divide real numbers.
- 2) Evaluate algebraic expressions using real numbers.
- 3) Translate sentences into mathematical expressions and simplify them.

Multiplying and Dividing Real Numbers

How to multiply or divide real numbers:

- 1) The product (or quotient) of two numbers with the same sign is POSITIVE.
- 2) The product (or quotient) of two numbers with opposite signs is NEGATIVE.

$$(-8)\cdot(-\frac{1}{2})=$$

$$-\frac{18}{18}$$
 =

$$\frac{-12(-5)}{7-(-5)}$$
 =

$$\frac{-13(-4)-(-8)(-2)}{(-10)(2)-4(-2)}=$$

$$(8+9)(4-12) =$$

$$(-7-4)(-9)-(-2)=$$

$$\frac{3^2-4^2}{7(-8+9)}$$
 =

Translate and evaluate:

The product of 4 and -7, added to -12.

The product of 3 and the difference between 3 and -7.

The sum of -18 and -6, divided by the product of 2 and -4.