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.

$(-4)\cdot(-6) =$

$(-7)\cdot 3 =$

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

$\frac{-18}{6} =$

$\frac{-28}{-4} =$

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

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

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

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

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

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.