

Beginning Algebra ~ Lesson 10

Work the following examples as you listen to the recorded lecture.

Multiplication Property of Equality**Remember -**

1. We can multiply or divide both sides of an equation by the same number.
2. Division by the coefficient of the variable is usually the final step in solving an equation.

Steps for solving equations:

1. **Simplify each side** of the equation by distributing multiplication and/or combining like terms.
2. Get the **variable terms to the same side** by **adding or subtracting** the smaller term.
3. Get rid of **any number** that is **added or subtracted** on the **side with the variable** by performing the **opposite operation**.
4. **Divide** both sides by the **coefficient** of the variable.

Solve:

Example 1: $-7x = -49$

Example 2: $3x - 1 = 26$

Example 3: $-x + 4 = -24$

Example 4: $8t + 5 = 5$

Example 5: $4a + a = -1 + 3a - 1 - 2$

Example 6: $8 + 4 = -6(5x - 2)$

Example 7: $4p - 11 - p = 2 + 2p - 20$

Example 8: $-19 + 74 = -5(x + 3)$