

1. Find the products. (from Unit 5, Lesson 9)

A. $(100) \cdot (-0.09)$

B. $(-7) \cdot (-1.1)$

2. Here are two stories:

- A family buys 6 tickets to a show. They also pay a \$3 parking fee. They spend \$27 to see the show.
- Diego has 27 ounces of juice. He pours equal amounts for each of his 3 friends and has 6 ounces left for himself.

Here are two equations:

$3x + 6 = 27$

$6x + 3 = 27$

- A. Decide which equation represents each story. What does x represent in each story?
- B. Find the solution to each equation using properties of operations and equality.

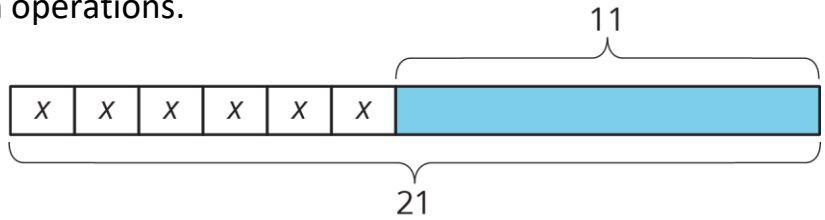
$$3x + 6 = 27$$

$$6x + 3 = 27$$

C. What does each solution tell you about its situation?

3. Here is a diagram and its corresponding equation. Find the solution to the equation using properties of equality and operations.

$$6x + 11 = 21$$



4. Name the property that explains why each statement is true.
- a. $11a + 3 + 5$ is equivalent to $11a + 8$.
 - b. $7a+4-2a$ is equivalent to $7a+-2a+4$.
 - c. $-(8a-8)$ is equivalent to $-8a + 8$.

Hint:

Associative is the grouping property

Commutative is the property that lets you change order

Distributive is the property that gives each piece inside the parentheses what is outside the parentheses

Identity is the property that gives you the same number

5. Sam says that the expression $4-5x$ is equivalent to the expression $-x$. Max disagrees, and says that we cannot write $4-5x$ as equivalent to $-x$. Who do you agree with, Sam or Max? Explain why you agree.
