

## Lesson 4: Practice Problems

1. Draw a square with side length 7 cm.
  - a. Predict the perimeter and the length of the diagonal of the square.
  - b. Measure the perimeter and the length of the diagonal of the square.
  - c. Describe how close the predictions and measurements are.

2. Find the products.

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

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

c.  $(-7.3) \cdot (5)$

d.  $(-0.2) \cdot (-0.3)$

3. Here are three stories:

- o A family buys 6 tickets to a show. They also pay a \$3 parking fee. They spend \$27 to see the show.
- o Diego has 27 ounces of juice. He pours equal amounts for each of his 3 friends and has 6 ounces left for himself.
- o Jada works for 6 hours preparing for the art fair. She spends 3 hours on a sculpture and then paints 27 picture frames.

Here are three equations:

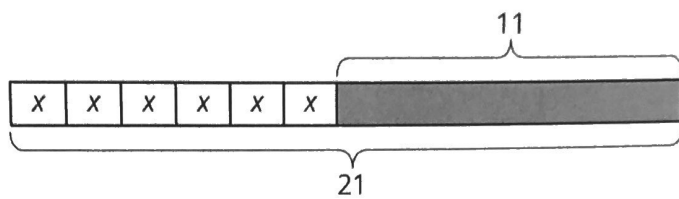
$$3x + 6 = 27$$

$$6x + 3 = 27$$

$$27x + 3 = 6$$

- a. Decide which equation represents each story. What does  $x$  represent in each equation?
- b. Find the solution to each equation. Explain or show your reasoning.
- c. What does each solution tell you about its situation?

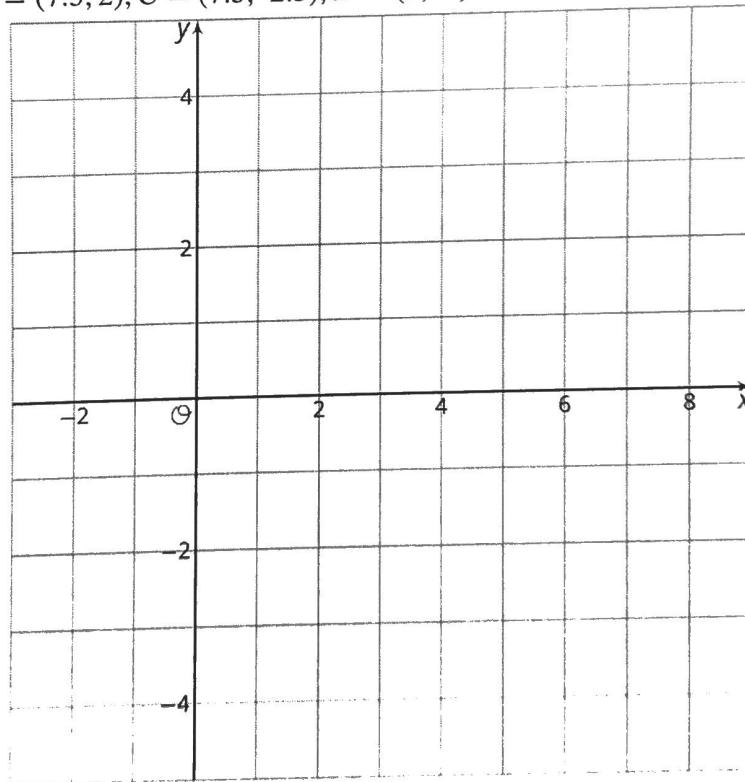
4. Here is a diagram and its corresponding equation. Find the solution to the equation and explain your reasoning.



$$6x + 11 = 21$$

5. a. Plot these points on the coordinate plane:

$$A = (3, 2), B = (7.5, 2), C = (7.5, -2.5), D = (3, -2)$$



- b. What is the vertical difference between  $D$  and  $A$ ?
- c. Write an expression that represents the vertical distance between  $B$  and  $C$ .