

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.

(From Unit 3, Lesson 1.)

2. Find the products.

- a. $(100) \cdot (-0.09)$
- b. $(-7) \cdot (-1.1)$
- c. $(-7.3) \cdot (5)$
- d. $(-0.2) \cdot (-0.3)$

(From Unit 5, Lesson 9.)

3. Here are three 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.

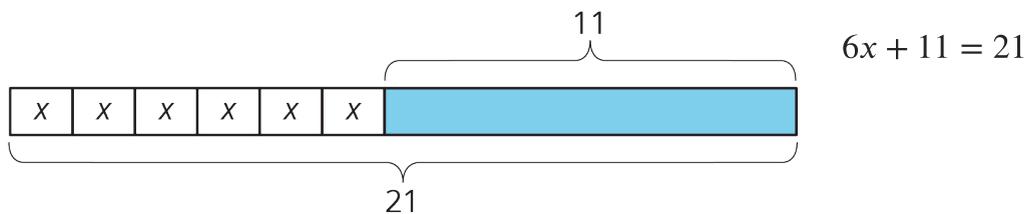
- Jada works for 6 hours preparing for the art fair. She spends 3 hours on a sculpture and then paints 27 picture frames.

Here are three equations:

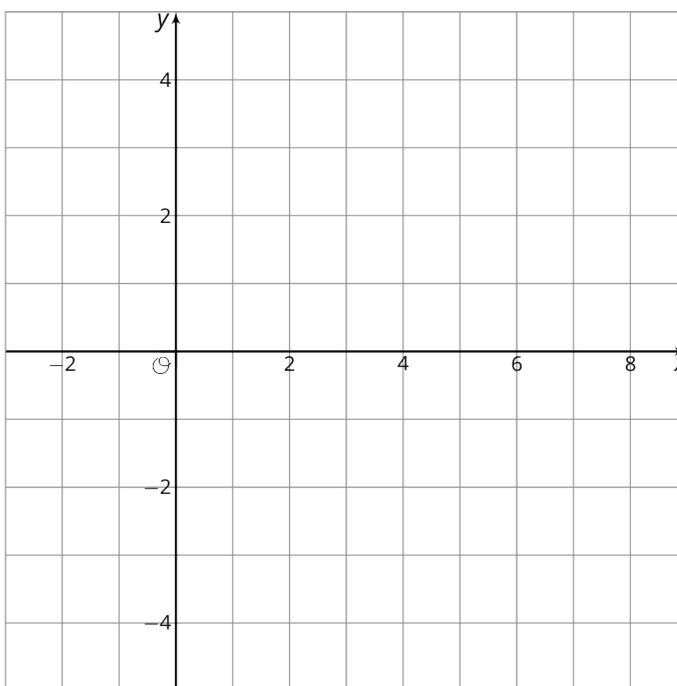
- $3x + 6 = 27$
- $6x + 3 = 27$
- $27x + 3 = 6$

- 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.



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 .

(From Unit 5, Lesson 7.)