

Lesson 4 Practice Problems

1. 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.

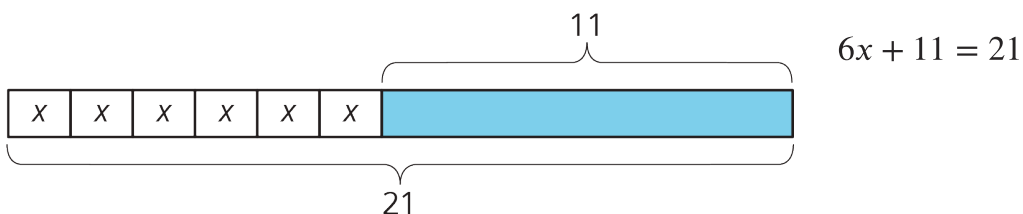
- Jada works for 6 hours preparing for the art fair. She spends 3 hours on a sculpture and then paints 27 picture frames.

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?

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



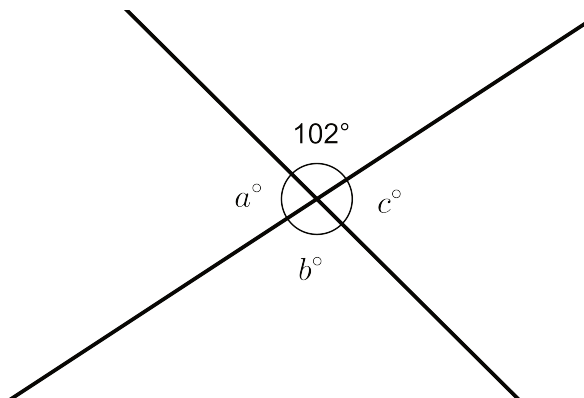
3. For each object, choose an appropriate scale for a drawing that fits on a regular sheet of paper. Not all of the scales on the list will be used.

Objects	Scales
a. A person	<input type="radio"/> 1 in : 1 ft
b. A football field (120 yards by $53\frac{1}{3}$ yards)	<input type="radio"/> 1 cm : 1 m
c. The state of Washington (about 240 miles by 360 miles)	<input type="radio"/> 1: 1000
d. The floor plan of a house	<input type="radio"/> 1 ft: 1 mile
e. A rectangular farm (6 miles by 2 mile)	<input type="radio"/> 1: 100,000
	<input type="radio"/> 1 mm: 1 km
	<input type="radio"/> 1: 10,000,000

(From Unit 2, Lesson 7.)

4. The diagram shows two intersecting lines.

Find the missing angle measures.



(From Unit 1, Lesson 12.)