

# Solving Conversion Stories

## Lesson 6-3

DATE

TIME



Solve the number stories below. Show your work. Label the units for each step.

- 1 Max has a shelf that is 1.3 m high. If he places a lamp that is 45 cm high on top of the shelf, what is the height from the floor to the top of the lamp in meters?
- What units do you need to convert? From cm to m
  - How are those units related? 100 cm = 1 m
  - What rule can you use to convert from the units you have to the units you need to solve the problem? Sample answer:  $\div 10^2$

Sample work:  $45 \text{ cm} \div 10^2 = 0.45 \text{ m}$   
 $1.3 \text{ m} + 0.45 \text{ m} = 1.75 \text{ m}$   
The height from the floor to the top of the lamp is 1.75 m.

- 2 Alida has a cough. Her mother gave her 10 mL of cough syrup and 0.5 L of water. How many mL of liquid was Alida given in all? Sample work:  
 $1 \text{ L} = 1,000 \text{ mL}$   
 $0.5 \text{ L} \times 10^3 = 500 \text{ mL}$   
 $500 \text{ mL} + 10 \text{ mL} = 510 \text{ mL}$

Alida was given 510 mL of liquid.

- 3 Tina and Kyle are doing a 5 km walk for charity. They passed a sign that said, "Only 100 meters to go!" How many km had Tina and Kyle walked when they passed the sign? Sample work:  
 $1,000 \text{ m} = 1 \text{ km}$   
 $100 \text{ m} \div 10^3 = 0.1 \text{ km}$   
 $5 \text{ km} - 0.1 \text{ km} = 4.9 \text{ km}$

Tina and Kyle had walked 4.9 km when they passed the sign.

## Try This

- 4 There are 8 servings in a large container of orange juice. If each serving has 60 mg of vitamin C, how many grams of vitamin C are in the whole container?

Sample work:  $60 \text{ mg} \times 8 = 480 \text{ mg}$   
 $1,000 \text{ mg} = 1 \text{ g}$        $480 \text{ mg} \div 10^3 = 0.48 \text{ g}$

There are 0.48 g of vitamin C in the container.