CHAPTER 12 Real-World Problems: Measurement

Lesson 12.1 Real-World Problems: One-Step Problems

Solve. Draw bar models to help you.

1. Hannah jogs 2,853 meters.
Kevin jogs 1,670 meters more than Hannah.
How far does Kevin jog?
Give your answer in kilometers and meters.

2. A string is cut into 7 equal pieces. Each piece is
90 centimeters long. How long was the string at first?
Give your answer in meters and centimeters.

3. A truck can carry up to 207 kilograms of cargo.
A brick has a mass of 4 kilograms.
What is the maximum number of bricks the truck can carry?

4. A fish tank contains 4,130 milliliters of water.
The tank's capacity is 9 liters 550 milliliters.
How much water is needed to fill the tank completely?
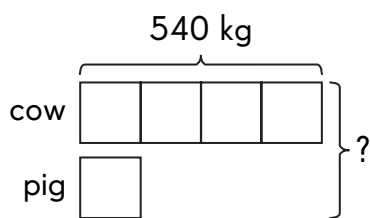Give your answer in liters and milliliters.

Lesson 12.2 Real-World Problems: Two-Step Problems

Solve. Draw bar models to help you.

1. The mass of a cow is 540 kilograms.
The cow is 4 times as heavy as a pig.
What is their total mass?

2. A chef has 4 bottles of cooking oil.
Each bottle contains 2 liters of oil.
How much cooking oil does the chef use if he has
1,365 milliliters of oil left after a week?
Give your answer in liters and milliliters.

3. There are 8 bottles. A nurse pours 100 milliliters of medicine into each bottle. There are still 2,880 milliliters of medicine left.

    a. How much medicine is there in the 8 bottles?
    b. How much medicine is there in all?
Give your answers in liters and milliliters.

4. Glen runs 4 times around a jogging track.
Jamal runs 3 times around the same track.
Glen runs a distance of 992 meters.
How far does Jamal run?

5. A basket has a watermelon and a bunch of grapes in it. The watermelon has a mass of 1,460 grams. The bunch of grapes has a mass of 850 grams. The total mass of the basket and the fruits is 3 kilograms 50 grams.

a. What is the total mass of the watermelon and the bunch of grapes? Give your answer in kilograms and grams.

b. What is the mass of the basket?

6.   The total capacity of jugs A and B is 5 liters 330 milliliters.
Jug A holds 850 milliliters more water than Jug B.
What is the capacity of Jug B?
Give your answer in milliliters.

Put on Your Thinking Cap!

1. Jane is 19 centimeters shorter than Mariah.
Rebecca is 9 centimeters taller than Mariah.
Find the difference in height between Jane and
Rebecca.

2. Madison Avenue is 8 kilometers 586 meters long.
Park Avenue is 3 kilometers 795 meters shorter than Madison Avenue.
Lexington Avenue is 4 kilometers 134 meters longer than Park Avenue.

a. How long is Park Avenue?
b. Which road is longer, Madison Avenue or Lexington Avenue?
How much longer is it?