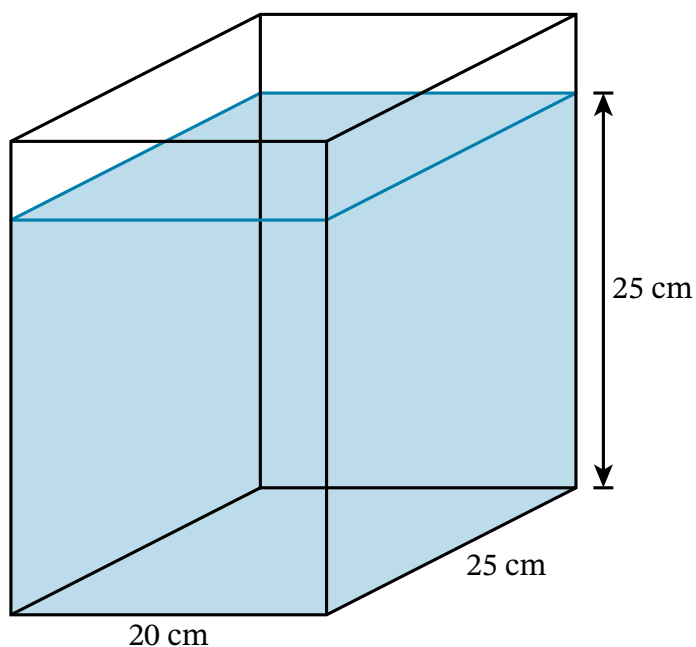24

Name _____   Date _____

1. Kelly buys an aquarium that is shaped like a right rectangular prism. The aquarium is 20 centimeters long, 25 centimeters wide, and 30 centimeters tall on the inside.

    a. What is the volume of water, in cubic centimeters, that the aquarium can hold?

    b. How many liters of water can the aquarium hold?

2. Kelly fills the aquarium with water to a height of 25 centimeters, as shown. How many more milliliters of water does Kelly need to pour into the aquarium to fill it to the top?

25 cm

25 cm

20 cm

3. Find the length, width, and height of at least two different right rectangular prisms that each have a volume of 30,000 cubic centimeters.

4. To have enough space for his fish, Blake needs an aquarium that takes up at least 1,000 square centimeters of space. He buys an aquarium that is shaped like a right rectangular prism and is 40 centimeters long, 30 centimeters wide, and 25 centimeters tall.

a. Does the aquarium take up at least 1,000 square centimeters of space? Show how you know.

b. Blake pours 24 liters of water into the aquarium. How many milliliters of water does he pour into the aquarium?

c. What is the height of the water in centimeters?