

Lesson 7 Multi-Step Problem Solving

Multi-Step Example

The students listed in the table each made a pitcher of lemonade.
About how many more liters did Serena make than Kyle? **7.RP.3, MP 6**

- (A) 0.89 liter
- (B) 1.4 liters
- (C) 3.37 liters
- (D) 11.37 liters

Person	Capacity
Serena	3 gal
Morgan	3,500 mL
Charity	13 quarts
Kyle	8 L

Use a problem-solving model to solve this problem.

1 Understand

Read the problem. Circle the information you know.
Underline what the problem is asking you to find.

2 Plan

What will you need to do to solve the problem? Write your plan in steps.

Step 1 Convert 3 gallons to _____.

Step 2 _____ the amount Kyle made from the amount of liters.

3 Solve

Use your plan to solve the problem. Show your steps.

Convert gallons to liters.

$$3 \text{ gal} \cdot \frac{3.79 \text{ L}}{1 \text{ gal}} \approx \text{_____} \text{ liters}$$

Subtract the amount in liters of Kyle's pitcher from Serena's pitcher amount in liters:

$$\text{_____} - 8 = \text{_____}$$

Serena made about _____ liters more than Kyle.

So, the correct answer is _____. Fill in that answer choice.

Read to Succeed!



You may need to refer to the conversion chart in your book to help you convert between measurement systems.

4 Check

How do you know your solution is accurate?

Lesson 7 (continued)

Use a problem-solving model to solve each problem.

- 1 Kofi and Vanessa each measured the length of their hands. In centimeters, about how much longer is Vanessa's hand compared to Kofi's? **7.RP.3, MP 6**

Student	Length of Hand
Kofi	7 in.
Vanessa	19 cm

- (A) 1.22 cm
 (B) 1.5 cm
 (C) 12 cm
 (D) 17.78 cm

- 3 In a sauce recipe, 2 cups of ketchup are added for every 1 cup of tomato sauce. If 2.25 cups of tomato sauce are added, about how many milliliters of ketchup should be added? Round to the nearest whole number. **7.RP.3, MP 6**

- 2 Three tables are going to be combined together in a row to make one long table. About how many feet long will the new table be? **7.RP.3, MP 6**

Table	Length
A	4.5 feet
B	2.7 meters
C	2 yards

- 4 **H.O.T. Problem** A suitcase weighing 50 pounds contains clothes, towels, and shoes. The weight distribution is shown in the circle graph below. About how much do the clothes weigh in kilograms? Round to the nearest hundredth. **7.RP.3, MP 6**

