

Apply knowledge of unit conversions in order to solve multi-step problems involving liquid volume in the metric system using visual models and equations.

Name:

Practice Set

B

Date:

1. Shyan's barrel contained 6 liters 775 milliliters of paint. She poured in 1 liter 118 milliliters more. The first day Shyan used 2 liters 125 milliliters of the paint. After the second day, there were 1,769 milliliters of paint remaining in the barrel. How much paint did Shyan use on the second day? Justify your answer with equations and a visual model.

2. Jose's vase can hold up to 2,419 milliliters of water. He poured 1 liter 299 milliliters of water into the empty vase. Then he added 398 milliliters. How much more water will the vase hold? Justify your answer with equations and a visual model.

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ANSWER KEY

Practice Set B

1. Shyan's barrel contained 6 liters 775 milliliters of paint. She poured in 1 liter 118 milliliters more. The first day Shyan used 2 liters 125 milliliters of the paint. After the second day, there were 1,769 milliliters of paint remaining in the barrel. How much paint did Shyan use on the second day? Justify your answer with equations and a visual model.

Paint after first day = F

$$6,775 \text{ mL} + 1,118 \text{ mL} - 2,125 \text{ mL} = F$$

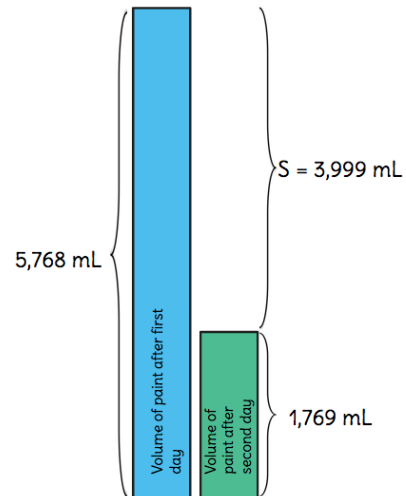
$$5,768 \text{ mL} = F$$

Paint used on second day = S

$$5,768 \text{ mL} - S = 1,769 \text{ mL}$$

$$5,768 \text{ mL} - 1,769 \text{ mL} = S$$

$$3,999 \text{ mL} = S$$



2. Jose's vase can hold up to 2,419 milliliters of water. He poured 1 liter 299 milliliters of water into the empty vase. Then he added 398 milliliters. How much more water will the vase hold? Justify your answer with equations and a visual model.

Amount of water in vase = A

$$1,299 \text{ mL} + 398 \text{ mL} = A$$

$$1,697 \text{ mL} = A$$

How much more water the vase will hold = W

$$2,419 \text{ mL} - 1,697 \text{ mL} = W$$

$$722 \text{ mL} = W$$

