

## Lesson 16 Practice Problems

1. An orange has about  $\frac{1}{4}$  cup of juice. How many oranges are needed to make  $2\frac{1}{2}$  cups of juice? Select **all** the equations that represent this question.

A.  $? \cdot \frac{1}{4} = 2\frac{1}{2}$

B.  $\frac{1}{4} \div 2\frac{1}{2} = ?$

C.  $? \cdot 2\frac{1}{2} = \frac{1}{4}$

D.  $2\frac{1}{2} \div \frac{1}{4} = ?$

2. Mai, Clare, and Tyler are hiking from a parking lot to the summit of a mountain. They pass a sign that gives distances.

Parking lot:  $\frac{3}{4}$  mile  
Summit:  $1\frac{1}{2}$  miles

- Mai says: "We are one third of the way there."
- Clare says: "We have to go twice as far as we have already gone."
- Tyler says: "The total hike is three times as long as what we have already gone."

Do you agree with any of them? Explain your reasoning.

3. Priya's cat weighs  $5\frac{1}{2}$  pounds and her dog weighs  $8\frac{1}{4}$  pounds. First, estimate the number that would complete each sentence. Then, calculate the answer. If any of your estimates were not close to the answer, explain why that may be.

a. The cat is \_\_\_\_\_ as heavy as the dog.

b. Their combined weight is \_\_\_\_\_ pounds.

c. The dog is \_\_\_\_\_ pounds heavier than the cat.

4. Before refrigerators existed, some people had blocks of ice delivered to their homes. A delivery wagon had a storage box in the shape of a rectangular prism that was  $7\frac{1}{2}$  feet by 6 feet by 6 feet. The cubic ice blocks stored in the box had side lengths  $1\frac{1}{2}$  feet. How many ice blocks fit in the storage box?

A. 270

B.  $3\frac{3}{8}$

C. 80

D. 180

(From Unit 4, Lesson 15.)

5. Fill in the blanks with 0.001, 0.1, 10, or 1000 so that the value of each quotient is in the correct column.

Close to  $\frac{1}{100}$

○ \_\_\_\_\_  $\div$  9

○  $12 \div$  \_\_\_\_\_

Close to 1

○ \_\_\_\_\_  $\div$  0.12

○  $\frac{1}{8} \div$  \_\_\_\_\_

Greater than 100

○ \_\_\_\_\_  $\div$   $\frac{1}{3}$

○  $700.7 \div$  \_\_\_\_\_

(From Unit 4, Lesson 1.)

6. A school club sold 300 shirts. 31% were sold to fifth graders, 52% were sold to sixth graders, and the rest were sold to teachers. How many shirts were sold to each group—fifth graders, sixth graders, and teachers? Explain or show your reasoning.

(From Unit 3, Lesson 15.)

7. Jada has some pennies and dimes. The ratio of Jada's pennies to dimes is 2 to 3.

a. From the information given, can you determine how many coins Jada has?

b. If Jada has 55 coins, how many of each kind of coin does she have?

c. How much are her coins worth?

(From Unit 2, Lesson 15.)