

## Lesson 8 Practice Problems

1. Clare said that  $\frac{4}{3} \div \frac{5}{2}$  is  $\frac{10}{3}$ . She reasoned:  $\frac{4}{3} \cdot 5 = \frac{20}{3}$  and  $\frac{20}{3} \div 2 = \frac{10}{3}$ .

Explain why Clare's answer and reasoning are incorrect. Find the correct quotient.

(From Unit 3, Lesson 7.)

2. A recipe for sparkling grape juice calls for  $1\frac{1}{2}$  quarts of sparkling water and  $\frac{3}{4}$  quart of grape juice.

- How much sparkling water would you need to mix with 9 quarts of grape juice?
- How much grape juice would you need to mix with  $\frac{15}{4}$  quarts of sparkling water?
- How much of each ingredient would you need to make 100 quarts of sparkling grape juice?

3. At a deli counter,

- Someone bought  $1\frac{3}{4}$  pounds of ham for \$14.50.
- Someone bought  $2\frac{1}{2}$  pounds of turkey for \$26.25.
- Someone bought  $\frac{3}{8}$  pounds of roast beef for \$5.50.

Which meat is the least expensive per pound? Which meat is the most expensive per pound? Explain how you know.

4. Consider the problem: After charging for  $\frac{1}{3}$  of an hour, a phone is at  $\frac{2}{5}$  of its full power. How long will it take the phone to charge completely?

Decide whether each equation can represent the situation.

a.  $\frac{1}{3} \cdot ? = \frac{2}{5}$

b.  $\frac{1}{3} \div \frac{2}{5} = ?$

c.  $\frac{2}{5} \div \frac{1}{3} = ?$

d.  $\frac{2}{5} \cdot ? = \frac{1}{3}$

(From Unit 3, Lesson 6.)

5. Find each quotient.

a.  $5 \div \frac{1}{10}$

b.  $5 \div \frac{3}{10}$

c.  $5 \div \frac{9}{10}$

(From Unit 3, Lesson 7.)

6. Consider the problem: It takes one week for a crew of workers to pave  $\frac{3}{5}$  kilometer of a road. At that rate, how long will it take to pave 1 kilometer?

Write a multiplication equation and a division equation to represent the question. Then find the answer and show your reasoning.

(From Unit 3, Lesson 6.)