Lesson 11 Practice Problems

1. Select **all** the statements that show correct reasoning for finding $\frac{14}{15} \div \frac{7}{5}$.

    A. Multiplying $\frac{14}{15}$ by 5 and then by $\frac{1}{7}$.

    B. Dividing $\frac{14}{15}$ by 5, and then multiplying by $\frac{1}{7}$.

    C. Multiplying $\frac{14}{15}$ by 7, and then multiplying by $\frac{1}{5}$.

    D. Multiplying $\frac{14}{15}$ by 5 and then dividing by 7.

    E. Multiplying $\frac{15}{14}$ by 7 and then dividing by 5.

2. 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.

3. Find the value of $\frac{15}{4} \div \frac{5}{8}$. Show your reasoning.

4. Consider the problem: Kiran has $2\frac{3}{4}$ pounds of flour. When he divides the flour into equal-sized bags, he fills $4\frac{1}{8}$ bags. How many pounds fit in each bag?

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

5. Divide $4\frac{1}{2}$ by each of these unit fractions.

   a. $\frac{1}{8}$

   b. $\frac{1}{4}$

   c. $\frac{1}{6}$

   (From Unit 4, Lesson 10.)

6. 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 4, Lesson 9.)

7. Elena and Noah are each filling a bucket with water. Noah's bucket is $\frac{2}{5}$ full and the water weighs $2\frac{1}{2}$ pounds. How much does Elena's water weigh if her bucket is full and her bucket is identical to Noah's?

   a. Write multiplication and division equations to represent the question.

   b. Draw a diagram to show the relationship between the quantities and to find the answer.

   (From Unit 4, Lesson 8.)

Grade 6 Unit 4

Lesson 11

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2