Lesson 4 Practice Problems

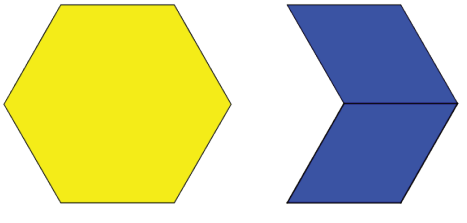
1. Consider the problem: A shopper buys cat food in bags of 3 lbs. Her cat eats $\frac{3}{4}$ lb each week. How many weeks does one bag last?

   a. Draw a diagram to represent the situation and label your diagram so it can be followed by others. Answer the question.

   b. Write a multiplication or division equation to represent the situation.

   c. Multiply your answer in the first question (the number of weeks) by $\frac{3}{4}$. Did you get 3 as a result? If not, revise your previous work.

2. Use the diagram to answer the question: How many $\frac{1}{3}$s are in $1\frac{2}{3}$? The hexagon represents 1 whole. Explain or show your reasoning.



3. Which question can be represented by the equation $? \cdot \frac{1}{8} = 3$?

   A. How many 3s are in $\frac{1}{8}$?

   B. What is 3 groups of $\frac{1}{8}$?

   C. How many $\frac{1}{8}$s are in 3?

   D. What is $\frac{1}{8}$ of 3?

4. Write two division equations for each multiplication equation.

   a. $15 \cdot \frac{2}{5} = 6$

   b. $6 \cdot \frac{4}{3} = 8$

   c. $16 \cdot \frac{7}{8} = 14$

5. Noah and his friends are going to an amusement park. The total cost of admission for 8 students is $100, and all students share the cost equally. Noah brought $13 for his ticket. Did he bring enough money to get into the park? Explain your reasoning.

(From Unit 4, Lesson 2.)

6. Write a division expression with a quotient that is:

   a. greater than $8 \div 0.001$

   b. less than $8 \div 0.001$

   c. between $8 \div 0.001$ and $8 \div \frac{1}{10}$

(From Unit 4, Lesson 1.)

7. Find each unknown number.

   a. 12 is 150% of what number?

   b. 5 is 50% of what number?

   c. 10% of what number is 300?

   d. 5% of what number is 72?

   e. 20 is 80% of what number?

(From Unit 3, Lesson 14.)