Mid-Chapter Check

Vocabulary Check

1. CCSS **Be Precise** Define *Commutative Property*. Provide an example of an operation that is commutative. Provide an example of an operation which is not commutative. (Lesson 2)

Sample answer: The order that numbers are added or multiplied does not change the answer. Addition is commutative because 4 + 6 = 6 + 4. Subtraction is not commutative because 6 − 4 is not equal to 4 − 6.

Skills Check and Problem Solving

Multiply. Write in simplest form. (Lessons 1–4)

2. $8 \times \frac{2}{5} =$ **$3\frac{1}{5}$**

3. $\frac{7}{8} \times \frac{2}{3} =$ **$\frac{7}{12}$**

4. $4\frac{3}{4} \times 2\frac{1}{8} =$ **$10\frac{3}{32}$**

Show your work

5. A new shirt costs $14.99. If the shirt is on sale for $\frac{1}{5}$ off its price, about how much would you save? (Lesson 1) **about $3.00**

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6. **Justify Conclusions** Corey needs 24 boards that are $47\frac{1}{2}$ inches long. (Lesson 5)

   a. How many feet of boards should he buy? Explain. **He will need to buy 95 feet of boards. $47\frac{1}{2}$ times 24 equals 1,140 inches divided by 12 equals 95 feet.**

   b. If you can only buy 8-foot boards, how many should he buy? Explain. **He will need to buy 12 boards that are 8 feet long. He needs $47\frac{1}{2}$ inch boards. An 8-ft board can make 2 boards ($(8 \times 12) \div 47\frac{1}{2} = 2\frac{2}{95}$). He needs 24 ÷ 2 or 12 of the 8-foot boards.**

7. **Persevere with Problems** What is the area of the picture and frame shown? Write your answer as a mixed number in simplest form. (Lesson 4) **$84\frac{7}{12}$ in²**