Lesson 7.5

Compare Fraction Factors and Products

COMMON CORE STANDARDS CC.5.NF.5a, CC.5.NF.5b

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Complete the statement with equal to, greater than, or less than.

- **1.** $\frac{3}{5} \times \frac{4}{7}$ will be **ESS than** $\frac{4}{7}$. **2.** $5 \times \frac{7}{8}$ will be ______

Think: $\frac{4}{7}$ is multiplied by a number less than 1; so, $\frac{3}{5} \times \frac{4}{7}$ will be less than $\frac{4}{7}$.

Problem Solving REAL WORLD

7. Starla is making hot cocoa. She plans to multiply the recipe by 4 to make enough hot cocoa for the whole class. If the recipe calls for $\frac{1}{2}$ teaspoon vanilla extract, will she need more than $\frac{1}{2}$ teaspoon or less than $\frac{1}{2}$ teaspoon

of vanilla extract to make all the hot cocoa?

8. Miles is planning to spend $\frac{2}{3}$ as many hours bicycling this week as he did last week. Is Miles going to spend more hours or fewer hours bicycling this week than last week?



Lesson Check (CC.5.NF.5a, CC.5.NF.5b)

- 1. Trevor saves $\frac{2}{3}$ of the money he earns at his after-school job. Suppose Trevor starts saving $\frac{1}{4}$ as much as he is saving now. Which statement below will be true?
 - (A) He will be saving four times as much.
 - (B) He will be saving less.
 - (C) He will be saving more.
 - (D) He will be saving the same amount.

- 2. Suppose you multiply a whole number greater than 1 by the fraction $\frac{3}{5}$. Which statement below will be true?
 - **A** The product will be equal to $\frac{3}{5}$.
 - **B** The product will be greater than $\frac{3}{5}$.
 - \bigcirc The product will be less than $\frac{3}{5}$.
 - **(D)** You cannot make any conclusions about the product.

Spiral Review (CC.5.NBT.6, CC.5.NBT.7, CC.5.NF.1)

- 3. In the next 10 months, Colin wants to save \$900 for his vacation. He plans to save \$75 each of the first 8 months. How much must he save each of the last 2 months in order to meet his goal if he saves the same amount each month? (Lesson 2.2)
 - (A) \$150
 - **(B)** \$300
 - **(c)** \$450
 - **(D)** \$600

- **4.** What is the total cost of 0.5 pound of peaches selling for \$0.80 per pound and 0.7 pound of oranges selling for \$0.90 per pound? (Lesson 4.7)
 - (A) \$0.51
 - **(B)** \$1.02
 - **©** \$1.03
 - **(D)** \$10.30
- **5.** Megan hiked 15.12 miles in 6.3 hours. If Megan hiked the same number of miles each hour, how many miles did she hike each hour? (Lesson 5.6)
 - (A) 0.24 miles
 - **B** 0.252 miles
 - (C) 2.4 miles
 - (D) 2.52 miles

- **6.** It is $42\frac{1}{2}$ miles from Eaton to Baxter, and $37\frac{4}{5}$ miles from Baxter to Wellington. How far is it from Eaton to Wellington, if you go by way of Baxter? (Lesson 6.6)

 - **B** $79\frac{1}{2}$ miles
 - **©** $80\frac{3}{10}$ miles
 - \bigcirc 80 $\frac{2}{5}$ miles