Unit 6, Lesson 16

Compare Products

Let's compare products.

Warm-up

True or False: Compare Products

Decide if each statement is true or false. Be prepared to explain your reasoning.

- $\frac{4}{5} \times 100 = 120$

- $\frac{4}{5} \times 100 < 100$

- $\frac{4}{5} \times 100 = 80$

Activity 1

Go the Distance

Kiran, Noah, and Elena each ran as far as they could in 1 hour.

- Elena ran $\frac{3}{4}$ of a 5-mile trail.
- Noah ran $\frac{1}{2}$ of a 5-mile trail.
- Kiran ran $1\frac{1}{4}$ of a 5-mile trail.

1. List the distances the students ran, in increasing order. Explain your reasoning.

2. Find a number that makes each statement true. Explain your reasoning.
   a. Diego ran farther than Noah, but not as far as Kiran.

      Diego ran _____ of a 5-mile trail.

   b. Lin ran farther than Kiran, but not twice as far as Kiran.

      Lin ran _____ of a 5-mile trail.

   c. Tyler ran farther than Noah, but not as far as Elena.

      Tyler ran _____ of a 5-mile trail.

Activity 2

Compare Expressions

1. Write $<$ or $>$ in each blank to make the statement true. Explain or show your reasoning.

   a. $\frac{5}{4} \times 100 ____ 100$

   b. $\frac{5}{7} \times 2 ____ 2$

   c. $\frac{1}{3} \times 25 ____ 25$

2. Write a number in each box to make the statement true. Explain or show your reasoning.

   a. $\frac{\square}{9} \times 50 < 50$

   b. $\frac{\square}{9} \times 50 = 50$

   c. $\frac{\square}{9} \times 50 > 50$

3. Write a number in each box to make the statement true. Explain or show your reasoning.

a. $\frac{9}{\square} \times 50 < 50$

b. $\frac{9}{\square} \times 50 = 50$

c. $\frac{9}{\square} \times 50 > 50$