

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.

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

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

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

16.1: Go the Distance

Kiran, Noah, and Elena each ran as far as they could in one 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. Be prepared to explain your reasoning.

2. Fill in the blanks to make each statement true. Be prepared to 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.

16.2: 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. $\frac{1}{3} \times 50$ ____ 100

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