Comparing Rates

Use unit rates to compare two rates that have the same units of measurement.

Daniel painted 9 planks in 6 minutes. Meredith painted 22 planks in 11 minutes. Who painted at a faster rate?

Write each rate as a unit rate.

Daniel's Rate: 9 planks 6 min

Meredith's Rate: 22 planks 11 min

$$= \frac{9 \text{ planks} \div 6}{6 \text{ min} \div 6}$$

$$= \frac{22 \text{ planks} \div 11}{11 \text{ minutes} \div 11}$$

$$= \frac{2 \text{ planks}}{1 \text{ min}}$$

Since 2 is greater than 1.5, Meredith is the faster painter. The faster rate is 22 planks in 11 min.

Find each unit rate and determine which rate is greater.

- 1. 51 hits on Jon's website in 3 h or 96 hits on Shana's website in 6 h
- 2. 330 mi on 15 gal or 240 mi on 10 gal
- 3. 90 breaths in 6 min or 112 breaths in 8 min

Find each unit price and determine which is a better buy.

- **4.** 20 gallons of gas for \$66.00 or 25 gallons of gas for \$81.25
- 5. Writing to Explain Earl and Mia danced in a charity fundraiser. Earl raised \$275 when he danced for 5 hours. Mia raised \$376 when she danced for 8 hours. Which dancer earned more for each hour danced? Explain how you found your answer.