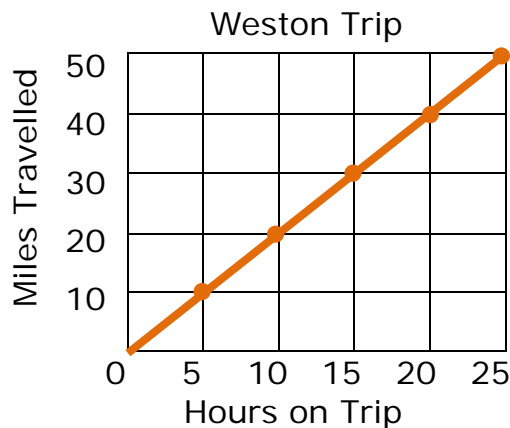


Name _____

Date _____

Graphing Proportional Relationships - Step-by-Step Lesson

Weston and Jaden go for long bike rides. The graph below represents Weston's trip over the period of 2 months. The equation below represents Jaden's consistent pace. Which rider moves at a faster pace?



Jaden's Pace

$$y = 20x$$

x = hours

y is miles



Explanation:

Since both paces are constant and proportional, we can compare the data by simply comparing 2 or more scenarios.

Weston: Weston covers 10 miles in 5 hours.

Weston covers 30 miles in 15 hours.

In both cases (10/5 and 30/15) Weston is at a pace of 2 miles per hour.

If we put Jaden's bike data to the test

Jaden Bike: Using the equation: $y = 20x$ we can see **that Jaden is moving at a substantially faster pace.**

In 5 hours, Jaden will cover (20×5) 100 miles.

In 15 hours, Jaden will cover (20×15) 300 miles.

Jaden is moving at $(300/15, 100/5)$ **20 miles per hour.**

