

Rational Word Problems
Current and Speed Problems

1. A paddleboat can move at a speed of 2 km/hr in still water. The boat is paddled 4 km downstream in a river in the same time it takes to go 1 km upstream. What is the speed of the river?

a) Set up equation

b) Solve for the variable. What does your answer tell you about the situation?

2. Joey is taking a trip with a friend. He travels 200 miles to Sam's home at an unknown speed. Then, he and Sam travel 300 more miles going 25 miles per hour faster for the same amount of time that it took Joey to get to Sam's. How fast were Joey and Sam going on the second part of the trip?

a) Set up Equation

b) Solve for the variable. What does your answer tell you about the situation?

Name _____

3. The speed of an Amtrak passenger train is 14 mph faster than the speed of a Central Railway freight train. The passenger train travels 400 mi in the same time it takes the freight train to travel 330 mi. Find the speed of each train.

a) Set Up Equation

b) Solve for the variable. What does your answer tell you about the situation?

4. On the first part of her trip Natalie road her bike 16 miles and on the second part of her trip she road her bike 42 miles. Her average speed during the second part of the trip was 6 miles per hour faster than her average speed on the first part of the trip. Find her average speed for the second part of the trip if the total time for the trip was 5 hours.

a) Set up Equation

b) Solve for the variable. What does your answer tell you about the situation?