NAME

Module 16   Solving Rational Equations
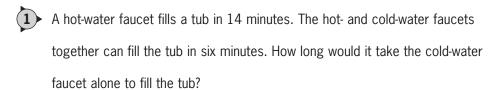**Lesson 4**   Solving Various Types of Problems
Using Rational Equations

guided notes

Lesson Objectives

• Solve work problems.
• Solve uniform motion problems.

The work equation is **rate × time = work**.

1 ► A hot-water faucet fills a tub in 14 minutes. The hot- and cold-water faucets together can fill the tub in six minutes. How long would it take the cold-water faucet alone to fill the tub?

10.5 minutes

The equation used to find distance is distance = **rate × time**.

2 ► Plane 1 flies 1,280 miles. Plane 2 flies 1,120 miles in the same time. Plane 2 flies 80 miles per hour slower than a Plane 1. What is the speed of Plane 1?

640 mph

3 ► Vince biked 40 miles to the beach and then made the return trip at twice the speed. The entire trip took five hours. Find Vince's speed on the way to the beach.

12 mph