NAME

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

Set 1

1. Pam and Lou are addressing invitations. Pam can address all the invitations in six hours. Lou can address all the invitations in three hours. How long will it take Pam and Lou to address all the invitations if they work together?

2 hours

2. Sue can mow the lawn in 40 minutes. Jim can mow the lawn in 60 minutes. How long will it take Sue and Jim to mow the lawn if they work together?

24 minutes

3. If Mark and Ann work together, they can clean the gutters in $1\frac{1}{2}$ hours. If Ann works by herself, she can clean the gutters in six hours. How long would it take Mark to clean the gutters by himself?

2 hours

Set 2

1. Jose drives 95 kilometers in the same time that Ben drives 120 kilometers. Ben drives 10 kilometers an hour faster than Jose. Find Jose's rate.

38 km/h

2. A wind-up toy mouse moves three feet per second faster than a wind-up toy soldier. In the same amount of time, the toy mouse travels 17.5 feet and the toy soldier travels 2.5 feet. Find the speed of the toy mouse.

3.5 ft/s

3. Howard hikes six miles up a mountain. Then he hikes back down three times as fast. The entire trip takes 6.4 hours. Find Howard's rate on the way up the mountain.

1.25 mph