More with dimensional analysis (using units to solve problems) name:

Solve each problem using rates and dimensional analysis.

1. It takes a beetle 15 seconds to walk 2 feet.

a. Write the two possible rates associated with this statement.

b. Use one rate to find out how long it will take the beetle to walk 9 feet.

c. Use the other rate to find out how far the beetle will walk in 40 seconds.

2. Bob reads 20 pages in 15 minutes. How long does it take him to read 35 pages?

3. A water faucet fills a 3-gallon bucket in 50 seconds. How many gallons of water will come from the faucet in only 30 seconds?

4. 2 gallons of paint will cover 450 square feet. How many gallons are needed to cover 1000 square feet?