



Using Unit Rates to Convert Measurements

► **Solve each problem. Show your work.**

- 1 Susan has a 12-inch board for constructing a wooden chair. The directions say to use a board that is 29 centimeters long. Is her board long enough to cut?
(1 inch = 2.54 centimeters)

- 2 Kevin uses 84 fluid ounces of water to make an all-purpose cleaner. The directions call for 4 fluid ounces of concentrated soap for every 3 cups of water. How many fluid ounces of soap should he use? (1 cup = 8 fl oz)

- 3 Shannon test-drives a car in Germany and drives 95 kilometers per hour. What is her speed in miles per hour? (1 kilometer \approx 0.62 mile)

- 4 Keith works 8 hours per day for 5 days per week. Melba works 2,250 minutes each week. Who spends more time at work?



Using Unit Rates to Convert Measurements *continued*

- 5 Jason runs 440 yards in 75 seconds. At this rate, how many minutes does it take him to run a mile? (1 mile = 1,760 yards)
- 6 Boxes of granola are on sale at a price of 2 for \$4.50. There are 12 ounces of granola in each box. What is the unit price in dollars per pound?
- 7 Sam is delivering two refrigerators that each weigh 105 kilograms. There is an elevator with a weight limit of 1,000 pounds. Can he take both refrigerators on the elevator in one trip? (1 kilogram \approx 2.2 pounds)
- 8 For every 140 feet that Kelly rides on her bicycle, the wheels turn 20 times. About how many times do the wheels turn in 5 miles? (1 mile = 5,280 feet)