1. A cheetah can reach speeds of 70 miles per hour. How fast can it run in kilometers per hour? Use the conversion 1 mile $\approx 1.61$ kilometers.

2. A hospital scale measures an infant that weighs 3.6 kilograms at birth. How many pounds does this infant weigh? Use the conversion 1 pound $\approx 0.45$ kilograms.

3. Gary introduced a new fish to his aquarium that is 8 centimeters long. In a few months, the fish will have grown an additional 3 inches. How many centimeters long is the fish after a few months? Use the conversion 1 inch $\approx 2.54$ centimeters.

4. The Professional Bowler's Association allows each player to use a bowling ball that has a weight of up to 7.3 kilograms. If a player has a 15-pound bowling ball, can he use it to play in the PBA? Use the conversion 1 kilogram $\approx 2.2$ pounds.

5. A ceiling fan uses three 60-watt light bulbs. The fan is on for 6 hours during the day and uses 1,080 watts of electricity. How many kilowatts do the light bulbs draw?

6. Fran went to Europe over the summer and returned to the United States with 130 Euros. At the time, one Euro was equivalent to $1.26$ United States dollars. How many United States dollars did Fran bring home from her trip?

7. Nicholas needs 2 cups of milk to make rice pudding. There is $\frac{1}{4}$ of a gallon of milk left. Does he have enough milk to make the pudding? Explain. Use the conversion 1 gallon $= 16$ cups.

8. A luxury sedan can travel 35 miles on each gallon of gas. How many kilometers can this same car travel on each liter of gas? Use the conversion 1 mile $\approx 1.61$ kilometers and 1 gallon $\approx 3.79$ liters.

9. Jessica can walk 3,219 meters in 30 minutes. What is her speed in kilometers per hour?

10. During a storm, 2 inches of rain fell in 15 minutes. At this rate, how many feet of rain would fall in 1 hour?

11. Carter purchased 8 yards of rope for 2 swings. The rope costs $0.40$ per foot. What is the cost of the rope per swing?
12. Suppose a person drinks 400 bottles of natural spring water per year. Each bottle contains 0.5 liter of water. How many gallons of water is this per year? Use the conversion 1 liter ≈ 0.26 gallon.

13. If a space vehicle reached the moon in 13.7 hours after traveling a distance of 385,000 kilometers, what was its speed in meters per second?

14. Over the course of 3 years, 6 missions of the Apollo program brought back 382 kilograms of various moon rocks. What was the average weight in pounds of moon rock that the missions brought back per year? Use the conversion 1 pound ≈ 453.59 grams.

15. Each week, the Smythe family produces about 48 pounds of garbage for disposal. How many tons of garbage is this in a year (52 weeks)? Use the conversion 1 ton = 2,000 pounds.

16. Hannah can type 90 words a minute. What is her average rate per second?

17. Gary's truck gets about 24 miles to the gallon. If gas costs $2.399 per gallon, what is the cost of gas per mile?

In 18 and 19, tell what the reciprocal rate represents.

18. eggs for 60¢ a dozen

19. bicycling at a rate of 10 miles per hour