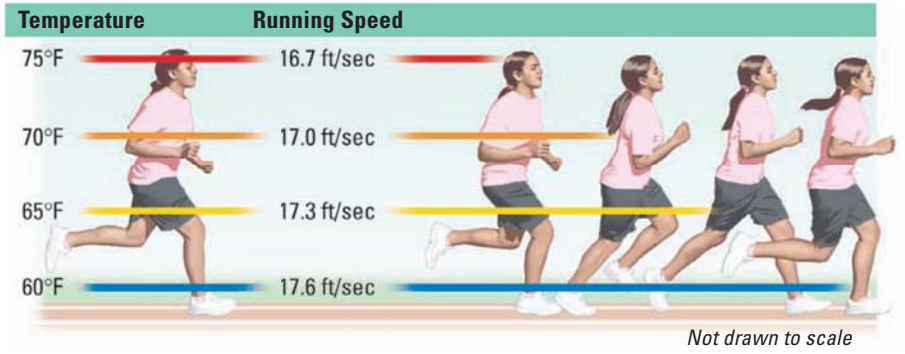
42. AQUACULTURE Aquaculture is the farming of fish and other aquatic animals. World aquaculture increased at a relatively constant rate from 1991 to 2002. In 1994 world aquaculture was about 20.8 million metric tons. In 2000 world aquaculture was about 35.5 million metric tons.

a. Write an equation that gives world aquaculture (in millions of metric tons) as a function of the number of years since 1991.

b. In 2001 China was responsible for 70.2% of world aquaculture. Approximate China's aquaculture in 2001.

43. MARATHON The diagram shows a marathon runner's speed at several outdoor temperatures.



Not drawn to scale

a. Write an equation in point-slope form that relates running speed (in feet per second) to temperature (in degrees Fahrenheit).

b. Estimate the runner's speed when the temperature is 80°F.

44. CHALLENGE The number of cans recycled per pound of aluminum recycled in the U.S. increased at a relatively constant rate from 1972 to 2002. In 1977 about 23.5 cans per pound of aluminum were recycled. In 2000, about 33.1 cans per pound of aluminum were recycled.

a. Write an equation that gives the number of cans recycled per pound of aluminum recycled as a function of the number of years since 1972.

b. In 2002, there were 53.8 billion aluminum cans collected for recycling. Approximately how many pounds of aluminum were collected? *Explain* how you found your answer.

MIXED REVIEW FOR TAKS

TAKS PRACTICE at classzone.com

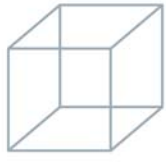
REVIEW
Lesson 1.3; TAKS Workbook

45. TAKS PRACTICE You want to write an expression that will always produce an odd number. Which of the following will always produce an odd number for any integer, n? *TAKS Obj. 2*

Ⓐ $3n$ Ⓑ $2n + 1$ Ⓒ $5n - 1$ Ⓓ $5n + 1$

REVIEW
Skills Review Handbook p. 927; TAKS Workbook

46. TAKS PRACTICE A 60 inch piece of wire was cut into equal segments, and the segments were then soldered together to form a cube. What is the volume of the cube? *TAKS Obj. 8*



Ⓕ 100 in.^{3} Ⓖ 125 in.^{3}

Ⓗ 1000 in.^{3} Ⓙ 1728 in.^{3}