

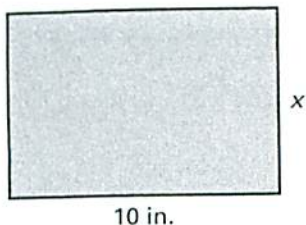
LESSON  
3.1

**Practice** *continued*  
For use with pages 132-140

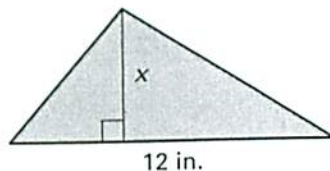
EVENTS ONLY

The rectangle or triangle has area  $A$ . Write and solve an equation to find the value of  $x$ .

19.  $A = 70 \text{ in.}^2$



20.  $A = 30 \text{ in.}^2$



21. **Caves** Cumberland Caverns in Tennessee is 44.4 kilometers long. This cave is 10.9 kilometers longer than Carlsbad Caverns in New Mexico. How long is Carlsbad Caverns?

22. **Bocce** Bocce is a lawn bowling game that originated in Italy. The bocce court below has an area of 1032 square feet. The width of the court is 12 feet. What is the length of the court?



23. **Speedskating** In the 2002 Winter Olympics, Cartriona LeMay Doan won the 500-meter race. Her winning time was 74.75 seconds. Find her average speed to the nearest tenth of a meter per second.

24. **Part-Time Job** You work at a grocery store part-time. You estimate that you spend  $\frac{3}{5}$  of your time stocking shelves. You work 20 hours each week. How many hours of your work week do you spend stocking shelves?

LESSON  
3.2**Practice** *continued*  
For use with pages 141–146ODDS ONLY!

Solve the equation.

13.  $9a + 4a = 26$

14.  $14y - 6y = 48$

15.  $38 = 26x - 7x$

16.  $16x - 3x = -52$

17.  $-9 = 11m - 8m$

18.  $4.5z - 2.5z = 24$

19. **Yoga Class** A fitness center offers yoga classes for \$10 per class and sells yoga mats for \$19.95. A person paid a total of \$139.95 to the fitness center for yoga classes and a mat. Find the number of yoga classes the person took.

20. **Library Books** Your school has a \$1200 grant to buy books and magazine subscriptions for the school library. The average cost of a magazine subscription is \$30. Your school decides to spend \$870 on books and the remaining amount on magazine subscriptions. How many magazine subscriptions can the school buy?

21. **Walking** You have already walked 5 miles of an 18-mile trail. If you walk the rest of the trail at a pace of 1 mile in 17 minutes, how many hours will it take you to finish the trail? Use the following verbal model to answer the question. Round your answer to the nearest tenth.

Walking rate (mi/min)	·	Number of minutes (min)	+	Number of miles already walked (mi)	=	Total number of miles walked (mi)
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22. **Swimming Pool** The capacity of a small children's swimming pool is 106 gallons of water. There are currently 15 gallons of water in the pool. You are filling the pool with water at a rate of 2 gallons per minute.

a. Write an equation that gives the amount  $y$  (in gallons) of water in the pool as a function of the number  $x$  of minutes from now.

b. After how many minutes will the pool be full?