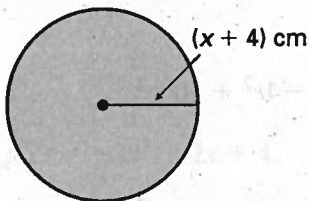


**LESSON**  
**9.7**

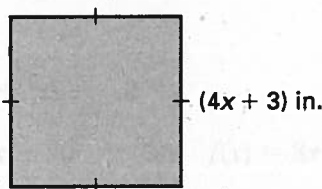
**Practice** *continued*  
For use with pages 600–605

Find the value of  $x$  in the geometric shape.

25. Area =  $144\pi \text{ cm}^2$



26. Area =  $225 \text{ in.}^2$

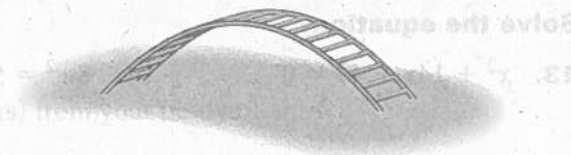


27. **Measuring Tape** A measuring tape drops from a roof that is 16 feet above the ground. After how many seconds does the measuring tape land on the ground?

28. **Playground** A curved ladder that children can climb on can be modeled by the equation

$$y = -\frac{1}{20}x^2 + x$$

where  $x$  and  $y$  are measured in feet.



a. Make a table of values that shows the height of the ladder for  $x = 0, 5, 10, 15,$  and 20 feet from the left end.

b. For what additional values of  $x$  does the equation make sense? *Explain.*

c. Plot the ordered pairs in the table from part (a) as points in the coordinate plane. Connect the points with a smooth curve.

d. At approximately what distance from the left end does the ladder reach a height of 5 feet? Check your answer algebraically.

