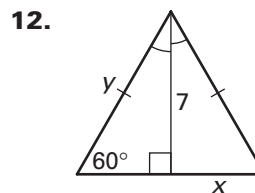
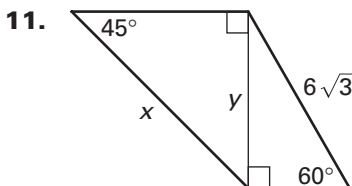
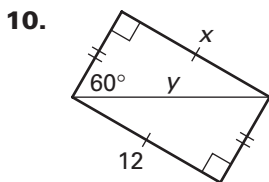
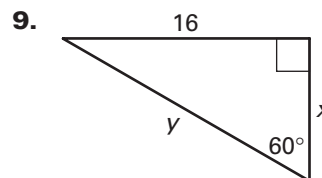
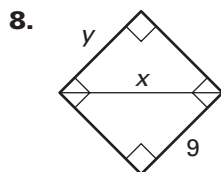
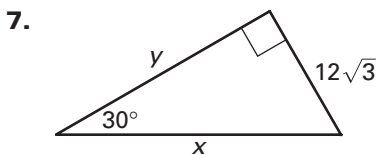
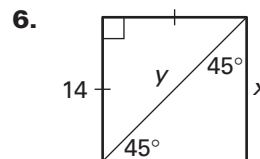
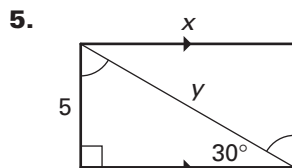
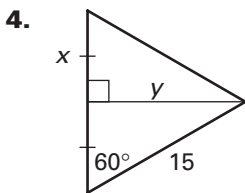
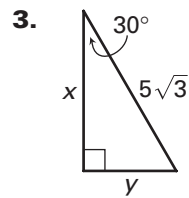
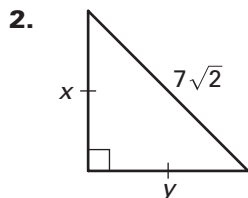
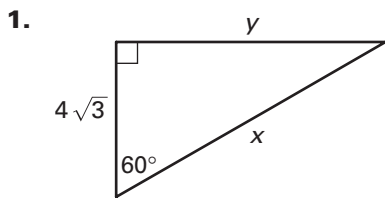


**LESSON 7.4** **Practice C**  
For use with pages 457–464

LESSON 7.4

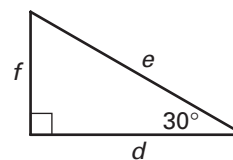
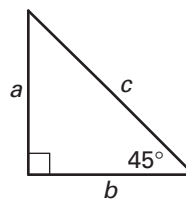
**Find the value of each variable. Write your answers in simplest radical form.**



13. **Multiple Choice** In the diagrams to the right,  $a = \frac{4}{3}f$ .

Which side length is the longest?

- A.  $b$                       B.  $c$   
C.  $d$                         D.  $f$



14. **Perimeter** The altitude of an equilateral triangle is 12 centimeters. Find the perimeter of the triangle. Round to the nearest tenth.

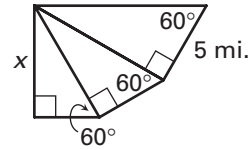
**LESSON**  
**7.4**

**Practice C** *continued*

*For use with pages 457–464*

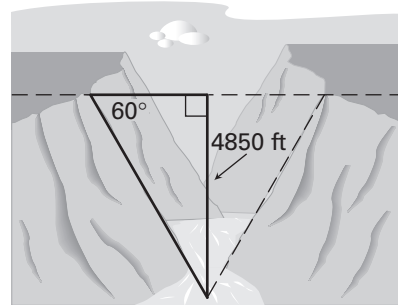
LESSON 7.4

- 15. Area** The diagonal of a square is 12 inches. Find the area. Round to the nearest tenth.
- 16. Diagonal** The perimeter of a rectangle is 32 feet. The length is three times as long as the width. Find the length of the diagonal. Round to the nearest tenth.
- 17. Altitude** The perimeter of an equilateral triangle is 45 meters. Find the length of an altitude. Round to the nearest tenth.
- 18. Distance** Each figure to the right is a  $30^\circ\text{-}60^\circ\text{-}90^\circ$  triangle. Find the value of  $x$ . Round to the nearest tenth.



**In Exercises 19–21, use the diagram and following information.**

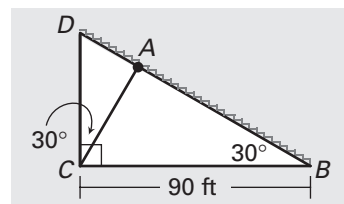
**Canyon** A symmetrical canyon is 4850 feet deep. A river runs through the canyon at its deepest point. The angle of depression from each side of the canyon to the river is  $60^\circ$ . Round to the nearest tenth.



- 19.** Find the distance across the canyon.
- 20.** Find the length of the canyon wall from the edge to the river.
- 21.** Is it more or less than a mile across the canyon?  
(5280 feet = 1 mile)

**In Exercises 22–24, use the diagram and following information.**

**Bleachers** A fan at a sporting event is sitting at point  $A$  in the bleachers. The bleacher seating has an angle of elevation of  $30^\circ$  and a base length of 90 feet. Round to the nearest tenth.



- 22.** Find the height  $CD$  of the bleachers.
- 23.** Find the height of the fan sitting at point  $A$  from the ground.
- 24.** Find the distance  $AB$  that the fan is sitting from the base, point  $B$ .