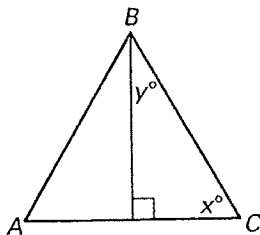


Practice A

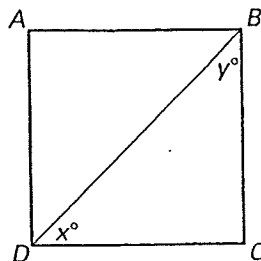
For use with pages 551–557

Find the value of each variable in the polygon.

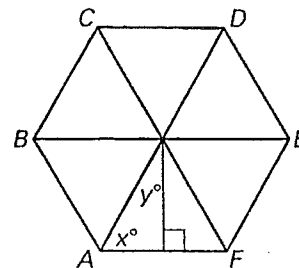
1. Equilateral
- $\triangle ABC$



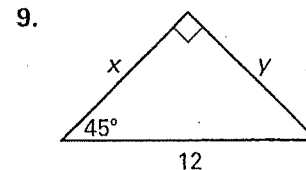
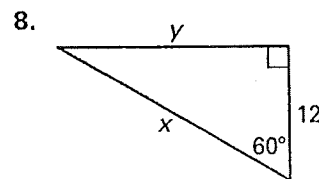
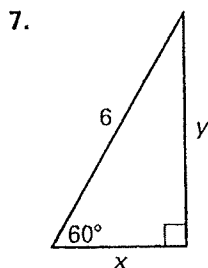
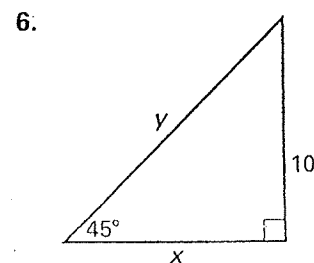
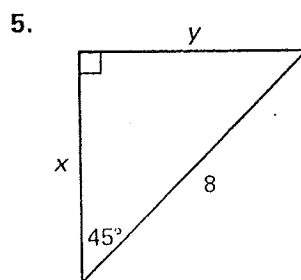
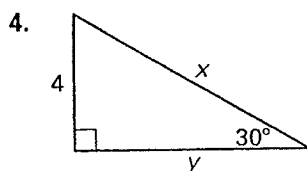
2. Square
- $ABCD$



3. Regular hexagon
- $ABCDEF$



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



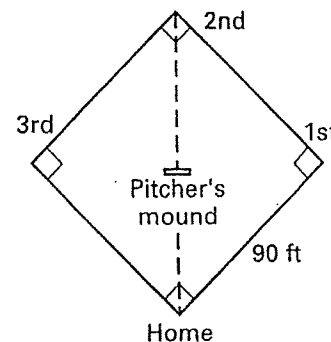
Sketch the figure that is described. Find the requested length. Round decimals to the nearest tenth.

10. The side length of an equilateral triangle is 20 centimeters. Find the length of an altitude of the triangle.
11. The perimeter of a square is 20 centimeters. Find the length of a diagonal.
12. The diagonal of a square is 10 inches. Find the length of a side.

Baseball In Exercises 13–15, use the diagram and the following information.

The infield of a baseball field is a square. The distance from home plate to first base is 90 feet.

13. What is the distance from home plate to second base?
14. What is the distance from third base to first base?
15. If the pitcher's mound is 60 feet 6 inches from home plate, is it the midpoint of the diagonal from home plate to second base?

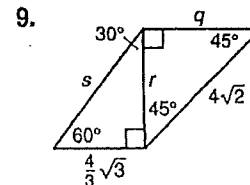
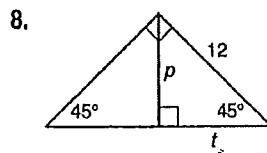
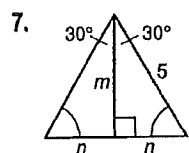
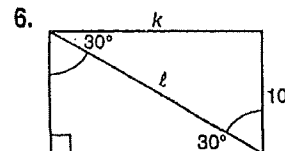
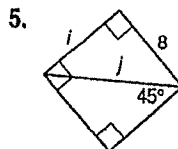
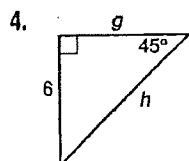
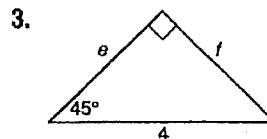
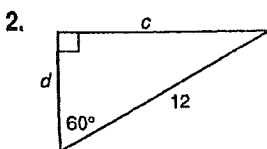
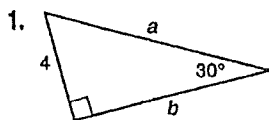


Extra Practice

9.4

Name _____

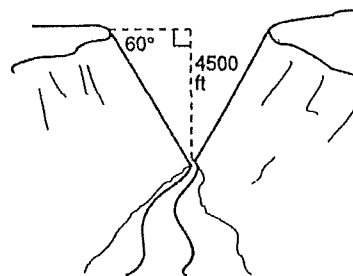
In 1–9, find the value of each variable in radical form.



10. The perimeter of a square is 36. What is the length of the diagonal?
11. What is the length of a side of an equilateral triangle whose altitude has a length of 18?
12. What is the length of a side of an isosceles right triangle if its hypotenuse is 16?
13. The length of the diagonal of a square is $\frac{5\sqrt{2}}{2}$. What is the length of a side?
14. The perimeter of a rectangle is 66. The length is twice the width. What is the length of the diagonal?
15. The perimeter of an equilateral triangle is 36. What is the length of an altitude?

In 16–18, use the diagram and the following information.

A point on the edge of a symmetrical canyon is 4500 ft above a river that cuts through the canyon floor. The angle of depression from each side of the canyon to the canyon floor is 60° .



16. Find the distance across the canyon.
17. Find the length of the canyon wall (from the edge to the river).
18. Is it more or less than a mile across the canyon?