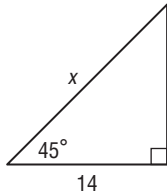


8-3 Practice

Special Right Triangles

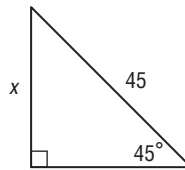
Find x .

1.



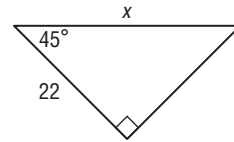
$14\sqrt{2}$

2.



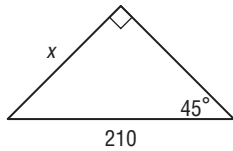
$22.5\sqrt{2}$ or $\frac{45\sqrt{2}}{2}$

3.



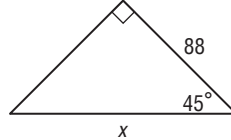
$22\sqrt{2}$

4.



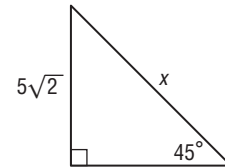
$105\sqrt{2}$

5.



$88\sqrt{2}$

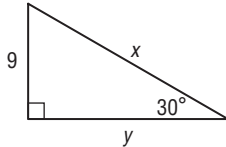
6.



10

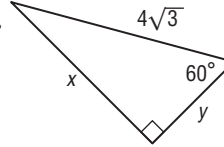
Find x and y .

7.



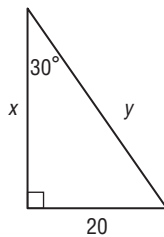
$x = 18;$
 $y = 9\sqrt{3}$

8.



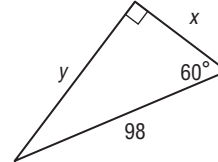
$x = 6;$
 $y = 2\sqrt{3}$

9.



$x = 20\sqrt{3};$
 $y = 40$

10.



$x = 49;$
 $y = 49\sqrt{3}$

11. Determine the length of the leg of 45°-45°-90° triangle with a hypotenuse length of 38.

$19\sqrt{2}$

12. Find the length of the hypotenuse of a 45°-45°-90° triangle with a leg length of 77 centimeters.

$77\sqrt{2}$ cm

13. An equilateral triangle has an altitude length of 33 feet. Determine the length of a side of the triangle.

$22\sqrt{3}$ ft

14. **BOTANICAL GARDENS** One of the displays at a botanical garden is an herb garden planted in the shape of a square. The square measures 6 yards on each side. Visitors can view the herbs from a diagonal pathway through the garden. How long is the pathway?

$6\sqrt{2}$ yd or about 8.49 yd

