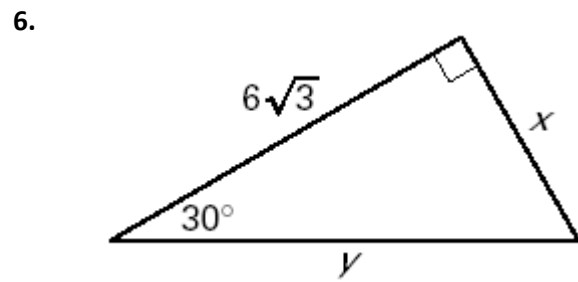
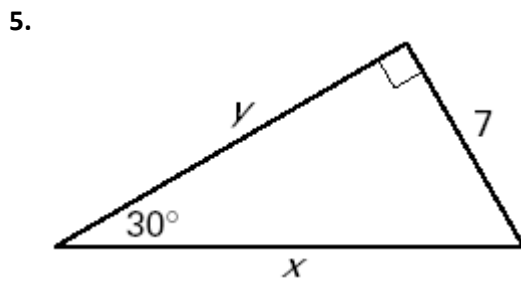
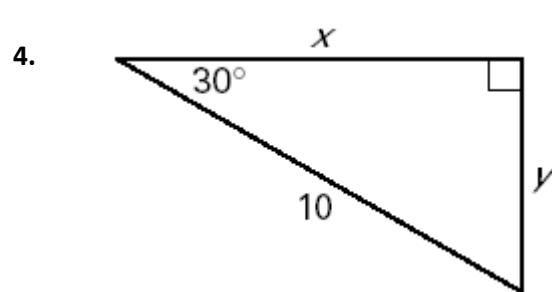
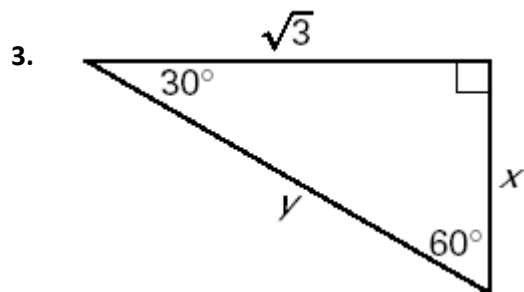
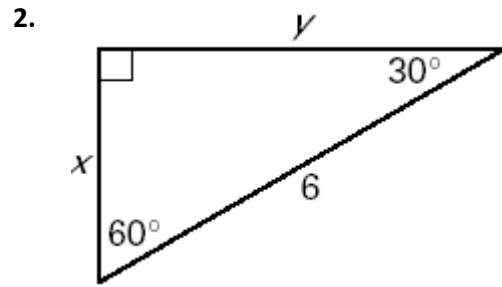
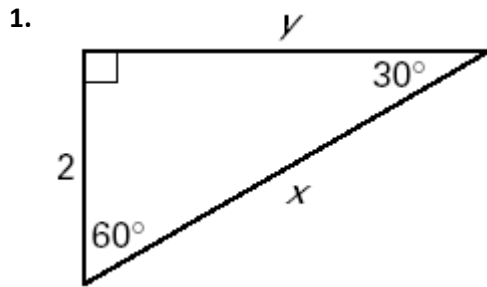
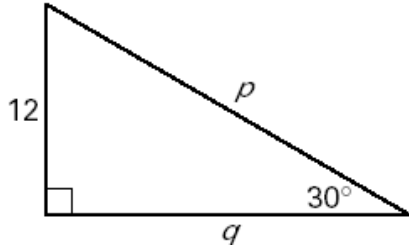


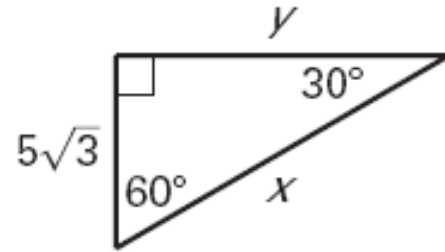
Find the value of each variable. Write your answers in simplest radical form.



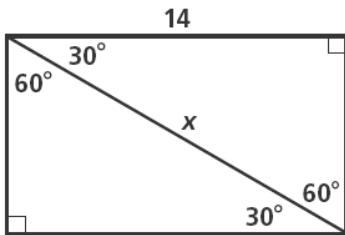
7.



8.



9.



10. In a 30° - 60° - 90° triangle, the shorter leg is 6 ft long. Find the length of the other two sides in simplest radical form.

11. An equilateral triangle has a side length of 8 inches. What is the height of the triangle in simplest radical form?

Answer Key:

- 1) $x = 4, y = 2\sqrt{3}$ 2) $x = 3, y = 3\sqrt{3}$ 3) $x = 1, y = 2$ 4) $x = 5\sqrt{3}, y = 5$ 5) $x = 14, y = 7\sqrt{3}$
 6) $x = 6, y = 12$ 7) $p = 24, q = 12\sqrt{3}$ 8) $x = 10\sqrt{3}, y = 15$ 9) $x = \frac{28\sqrt{3}}{3}$ 10) long: $6\sqrt{3}$, hyp: 12
 11) $4\sqrt{3}$