

**5.7-5.8**  
**Study Guide**

Name \_\_\_\_\_  
Date \_\_\_\_\_

**Simplify.**

1.  $\sqrt{49}$

2.  $\sqrt{48}$

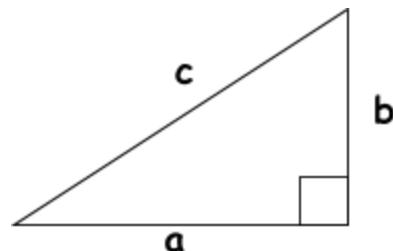
3.  $\sqrt{\frac{2}{15}}$

4.  $\sqrt{\frac{5}{12}}$

**Use the right triangle shown to find each value.**

4. If  $a = \sqrt{2}$  and  $b = \sqrt{6}$ , find  $c$ .

5. If  $b = 10$  and  $c = 11$ , find  $a$ .



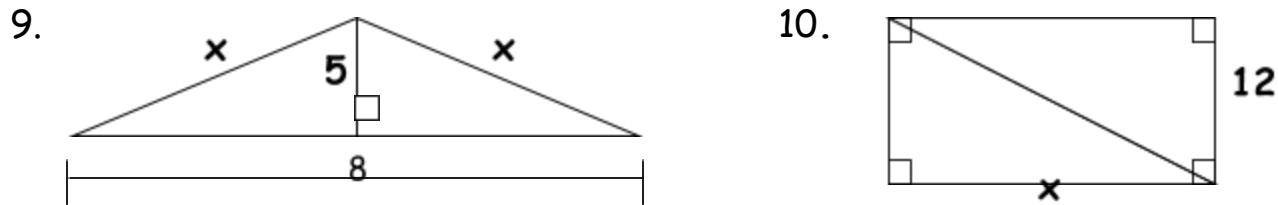
**State whether a triangle with the given lengths is acute, right, or obtuse.**

6. 4, 6, 8

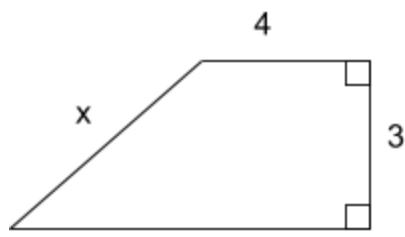
7. 8, 10, 12

8.  $\sqrt{7}$ ,  $\sqrt{7}$ ,  $\sqrt{14}$

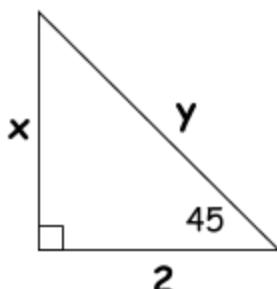
**Find each missing value.**



11.



12.



13.

14.

16. A  $45^\circ$ - $45^\circ$ - $90^\circ$  triangle has hypotenuse 10 ft. Find the perimeter and area.
17. Find the perimeter of a square that has diagonals 8 cm long.
18. The sides of an equilateral triangle are 12 cm long. Find the length of an altitude of the triangle.
19. How long is the altitude to the base of an ISOSCELES triangle if the sides are 13, 13, 10.