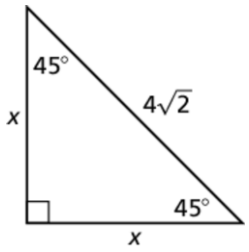
Name _____ Date _____

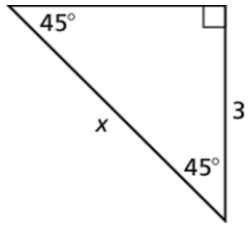
9.2 Practice A

In Exercises 1–3, find the value of *x*. Write your answer in simplest form.

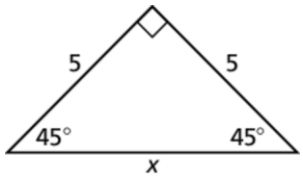
1.



2.

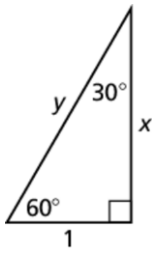


3.

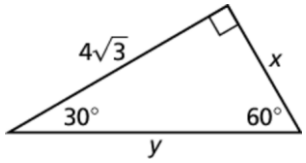


In Exercises 4–6, find the values of *x* and *y*. Write your answers in simplest form.

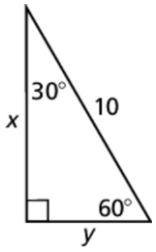
4.



5.

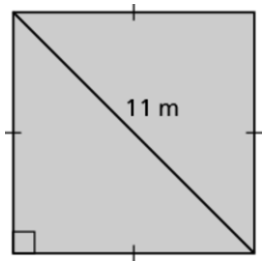


6.

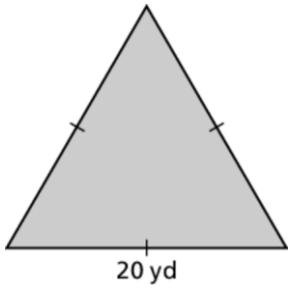


In Exercises 7 and 8, find the area of the figure.

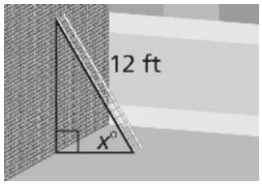
7.



8.



9. A 12-foot ladder is leaning up against a wall, as shown. How high does the ladder reach up the wall when *x* is 30°? 45°? 60°?

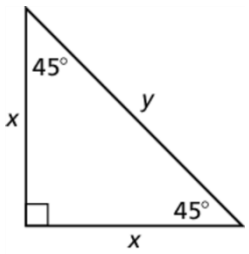


Name _____ Date _____

9.2 Practice B

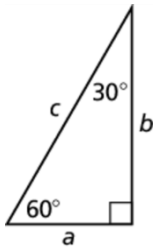
In Exercises 1 and 2, copy and complete the table. Write your answers in simplest form.

1.



x	5		$\sqrt{2}$	
y		$4\sqrt{2}$		24

2.



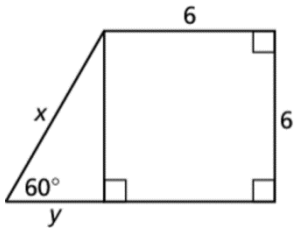
a	11			
b		9		$5\sqrt{3}$
c			16	

3. The side lengths of a triangle are given. Determine whether each triangle is a *45°-45°-90° triangle*, a *30°-60°-90° triangle*, or *neither.*

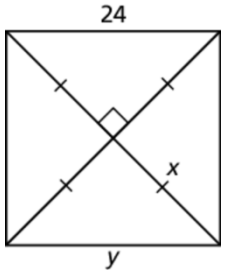
a. 5, 10, $5\sqrt{3}$ **b.** 7, 7, $7\sqrt{3}$ **c.** 6, 6, $6\sqrt{2}$

In Exercises 4–6, find the values of the variables. Write your answers in simplest form.

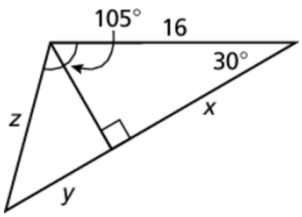
4.



5.



6.



7. You build a two-person tent, as shown. How many square feet of material is needed to make the tent, assuming the tent has a floor?