$\qquad$

## The Right Triangle Review

Find the missing side of each right triangle. Leave your answer in simplest radical form.
1.

2.

12

Find the value of $x$. Round answers to the nearest tenth.
3.

4.


10

Draw a picture, write an equation, and solve the problem. Round answers to the nearest tenth.
5. A tree casts a 50-m shadow. If the sun's rays form a $47^{\circ}$ angle with the ground, how tall is the tree?
6. Grover is flying a kite with a 17 -ft string. If the string makes a $55^{\circ}$ angle with the ground, how high above the ground is the kite?

Find the value of $x$ and $y$. Leave your answers in radical form.
7.

8.

9. Find the diagonal of the square with a side of 7. (Leave your answer in simplest radical form.)
A. $7 \sqrt{2}$
B. $7 \sqrt{3}$
C. 14
D. $14 \sqrt{2}$
E. $49 \sqrt{2}$


7
11. Find the value of $x$ to the nearest degree.

13. Find the value of $x$ to the nearest tenth.

15. Solve for $x$.

10. Find the length of the missing side. (Leave your answer in simplest radical form.)

12. Find the value of $x$. (Leave your answer in simplest radical form.)
A. 6
B. 16
C. 12
D. 18
E. $12 \sqrt{3}$

14. Find the area of an equilateral triangle whose perimeter is 24. (Leave your answer in simplest radical form.)

