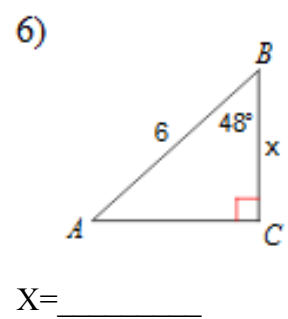
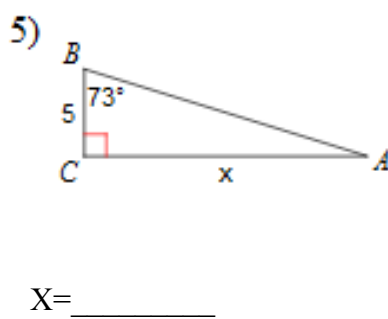
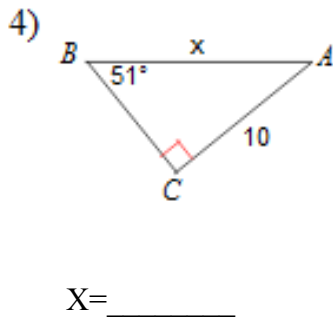
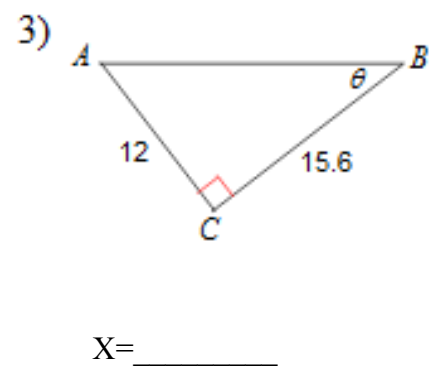
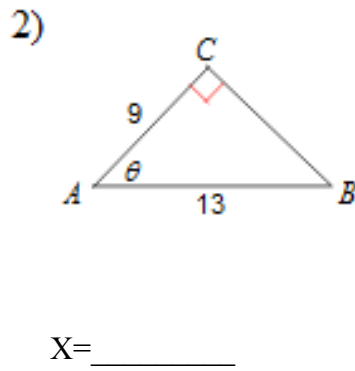
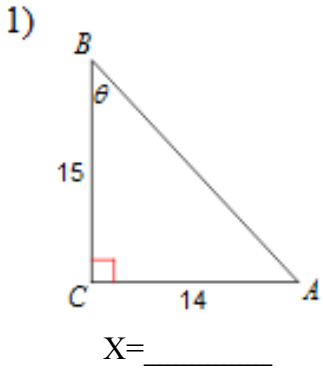


Honors---Unit 5 Assessment Review – Right Triangles

Name: _____

Find the measure of each angle. Round your answer to the nearest tenth.



For each problem below, draw and label a triangle. Then, use a trig function to solve. Show all work.

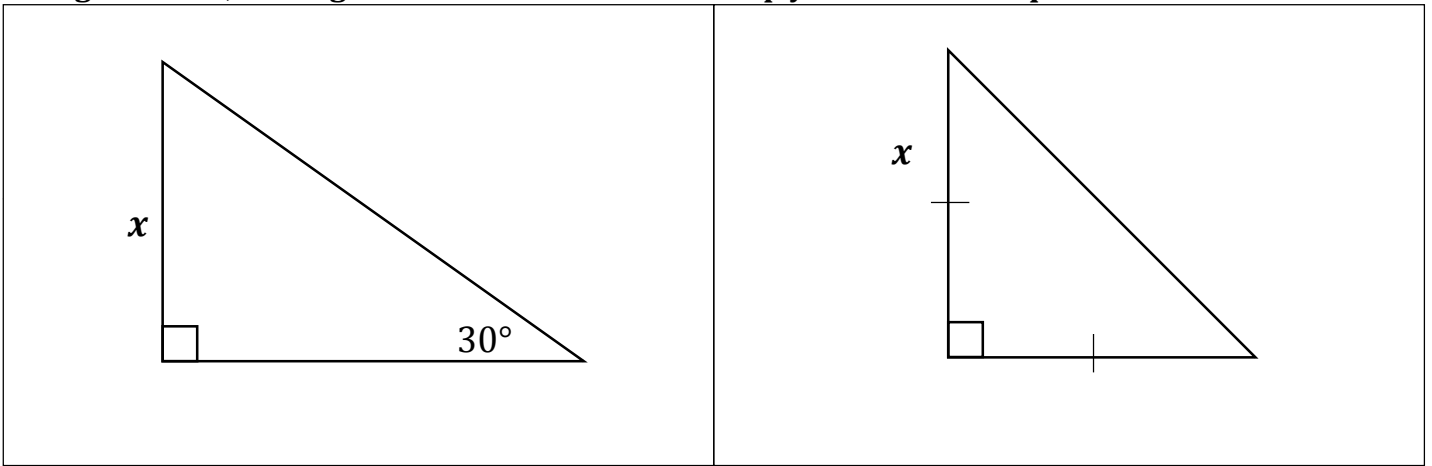
7. A boy flying a kite lets out 300 feet of string. The kite has an angle of elevation with the ground of 38° . How high above the ground is the kite?

8. A ladder leaning against the wall make an angle of 74° with the ground. If the foot of the ladder is 7 feet away from the wall, how high on the wall is the ladder?

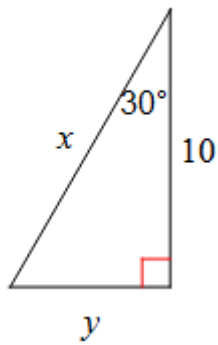
9. A wire attach to the top of a pole connects to a stake in the ground 20 feet from the foot of the pole. The wire makes an angle of 58° with the ground. What is the length of the ladder?

Find the missing sides of the special right triangles below. Fill in and label all sides/angles of the

triangles below, leaving the sides in terms of x to help you answer the questions below:

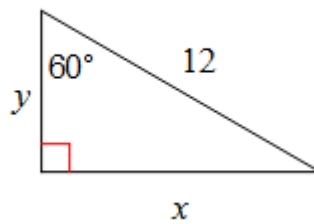


10)



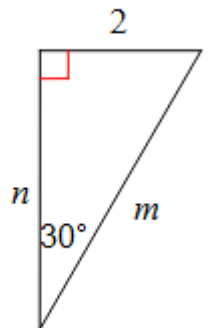
$x = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$

11)



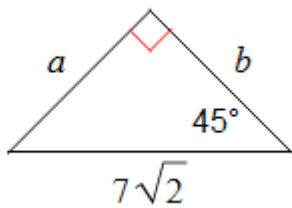
$x = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$

12)



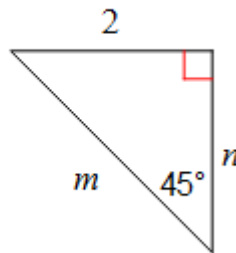
$n = \underline{\hspace{2cm}}$
 $m = \underline{\hspace{2cm}}$

13)



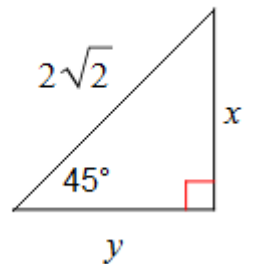
$a = \underline{\hspace{2cm}}$
 $b = \underline{\hspace{2cm}}$

14)



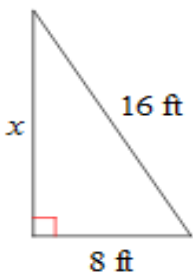
$m = \underline{\hspace{2cm}}$
 $n = \underline{\hspace{2cm}}$

15)

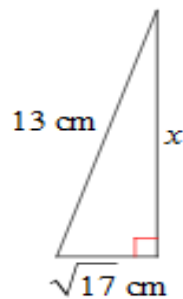


$x = \underline{\hspace{2cm}}$
 $y = \underline{\hspace{2cm}}$

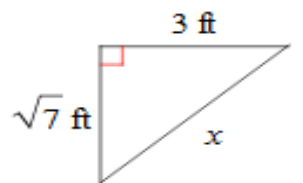
16)



17)



18)

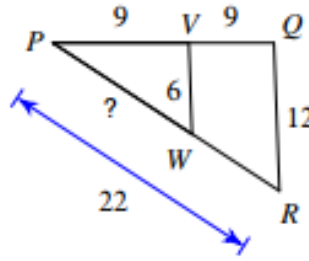


Find the missing side of each right triangle below. Leave your answer in the simplest radical form.

Use definition if similarity to solve for the following x -values.

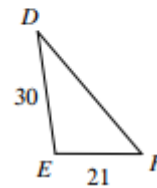
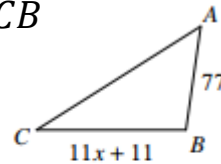
19) Find the missing value

$x =$ _____



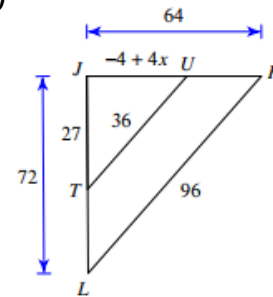
20) Find the missing value of x and the length of side \overline{CB}

$x =$ _____
 $\overline{CB} =$ _____



21) Find the missing value of x and the length of side \overline{JU}

$x =$ _____
 $\overline{JU} =$ _____



Solve the following trigonometric equations.

22) $2 \sin(x) - 1 = 0$

$x =$ _____

23) $\tan(x) + 1 = 0$

$x =$ _____

24) $5 \tan(3x) - 5 = 0$

$x =$ _____

25) $5 \cos(x) + 7 = 3$

$x =$ _____

26) $\sin(x) + \sqrt{2} = \frac{\sqrt{2}}{2}$

$x =$ _____

27) $4 \sin^2(x) - 1 = 0$

$x =$ _____