

Geometry – Chapter 8 Review

Name _____ Date _____ Hour _____

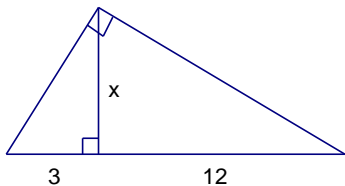
Right Triangles

Show your work for full credit on each problem.

1) Find the geometric mean between 4 and 12.

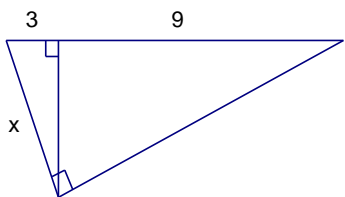
2) Find x .

$x =$ _____



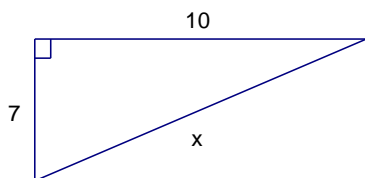
3) Find x .

$x =$ _____



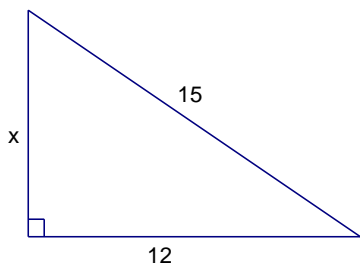
4) Find x .

$x =$ _____



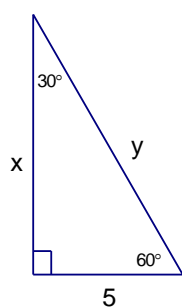
5) Find x .

$x =$ _____



- 6) To support a post, a cable is attached to the post at a point 18 feet above the ground. _____
 The cable is pulled taut and anchored in the ground 18 feet away from the post.
 Draw a picture of the situation. How long is the cable?

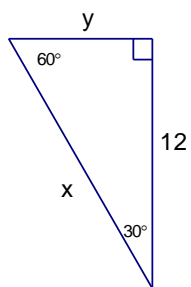
- 7) Find x and y .



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

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

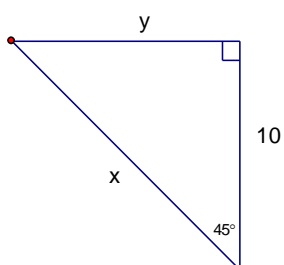
- 8) Find x and y .



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

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

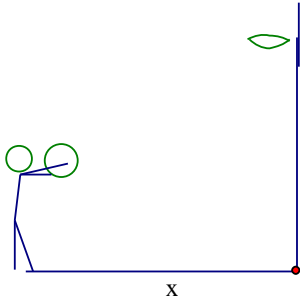
- 9) Find x and y .



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

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

- 10) A basketball player is playing basketball. He is getting ready to shoot and he wants to know how far he is from the hoop. The hoop is 10 feet tall. The angle of elevation from his feet to the basket is 50° . How far is the player from the hoop?

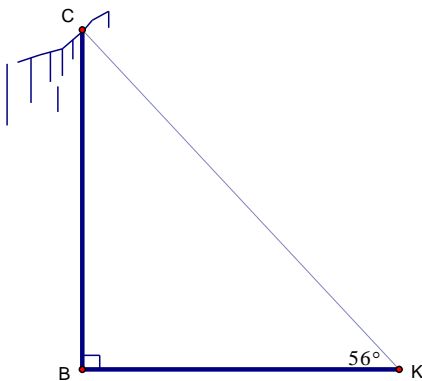


- 11) Fabio is laying on his back flying a kite at noon. The string length from Fabio to the kite is 45 feet and the kite is 36 feet off the ground. Find the angle of elevation to the kite. How far is Fabio from the shadow. (draw a picture)

angle = _____

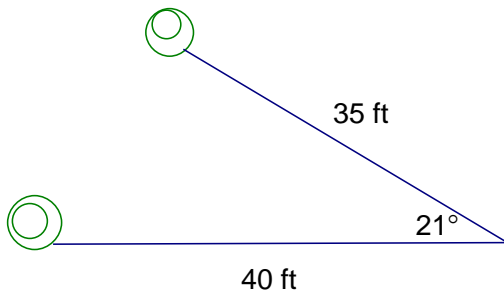
F. to shadow = _____

- 12) Katie is standing on the ground 97 yards from the base of a cliff. She noted that the angle formed by the ground and the line of sight to the top of the cliff is 56° . Find the diagonal distance from Katie to the top of the cliff to the nearest yard.



- 13) A helicopter is approaching a landing pad from 1120 feet away.
The altitude of the helicopter is 200 feet. What is the angle of depression
of the pilot's line of sight to the landing pad?

- 14) Chloe was looking at two statues in a museum, one a man and the other a woman.
Her lines of sight to the statues formed an angle of 21° . The distance to the woman
was 40 feet and to the man was 35 feet. How far apart were the statues?



- 15) Find x .

$x =$ _____

