

# Geometry

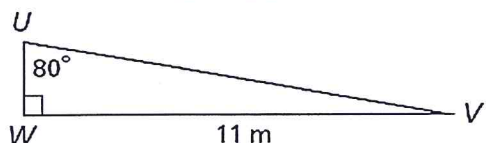
Name: \_\_\_\_\_

## Unit F Review

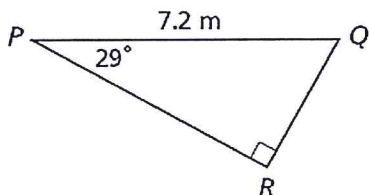
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Find each indicated length. Round your answers to the nearest hundredth.

1.  $UV =$  \_\_\_\_\_



2.  $PR =$  \_\_\_\_\_



Find  $x$  in each of the following:

3.  $\sin 72^\circ = x$        $x =$  \_\_\_\_\_

4.  $\tan x = 2.356$        $x =$  \_\_\_\_\_

5.  $\cos 43^\circ = x$        $x =$  \_\_\_\_\_

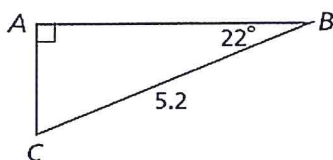
6.  $\sin x = 0.815$        $x =$  \_\_\_\_\_

Find the unknown measures indicated. Round lengths to the nearest tenth and angle measures to the nearest degree.

7.  $\angle C =$  \_\_\_\_\_

8.  $AC =$  \_\_\_\_\_

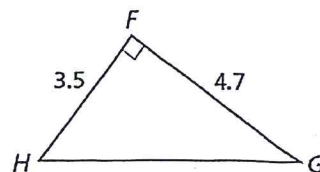
9.  $AB =$  \_\_\_\_\_



10.  $\angle H =$  \_\_\_\_\_

11.  $\angle G =$  \_\_\_\_\_

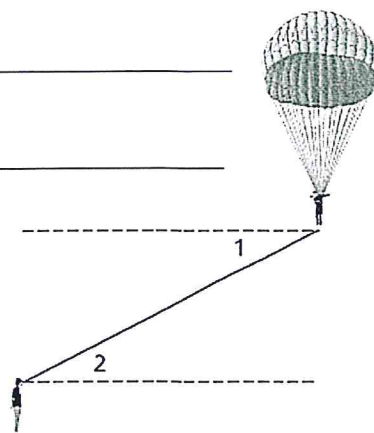
12.  $HG =$  \_\_\_\_\_



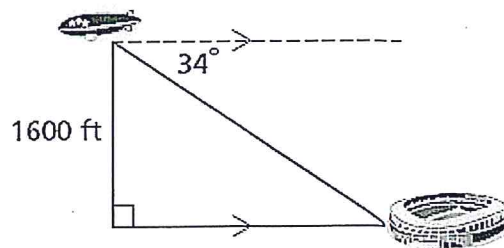
Classify each angle as an angle of elevation or angle of depression.

13.  $\angle 1$  \_\_\_\_\_

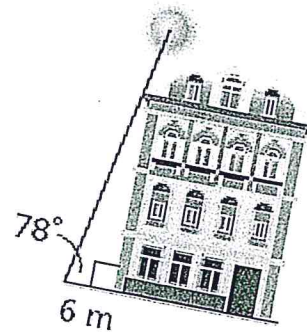
14.  $\angle 2$  \_\_\_\_\_



15. An observer in a blimp sights a football stadium at an angle of depression of  $34^\circ$ . The blimp's altitude is  $1600\text{ ft}$ . What is the horizontal distance from the blimp to the stadium? Round to the nearest foot.



16. When the angle of elevation of the sun is  $78^\circ$ , a building casts a shadow that is 6 m long. What is the height of the building to the nearest tenth of a meter?

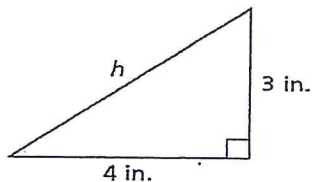


Use Pythagorean Theorem to determine if the three lengths will make a right, acute or obtuse triangle: Show work by determining which is "c" and filling in  $c^2$ ?  $a^2 + b^2$ . Check to see if  $>$ ,  $<$ , or  $=$

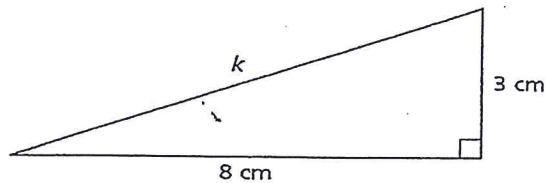
- a) 15 cm, 20 cm, 25 cm      b) 7 cm, 8 cm, 9 cm      c) 6 cm, 11 cm, 8 cm

Find the missing length(s).

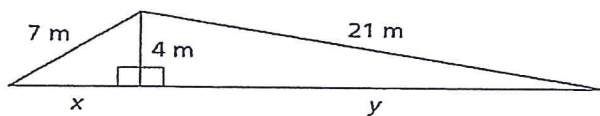
5.



6.

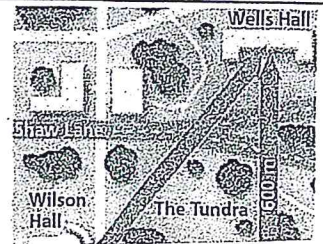


7.



## Practice #2

Moesha, a college student, needs to walk from her dorm room in Wilson Hall to her math class in Wells Hall. Normally, she walks 500 meters east and 600 meters north along the sidewalks, but today she is running late. She decides to take the shortcut through the Tundra.



- How many meters long is Moesha's shortcut?
- How much shorter is the shortcut than Moesha's usual route?

- The bottom of a ladder must be placed 3 feet from a wall. The ladder is 12 feet long. How far above the ground does the ladder touch the wall?

- A soccer field is a rectangle 90 meters wide and 120 meters long. The coach asks players to run from one corner to the corner diagonally across the field. How far do the players run?