HW 7-6
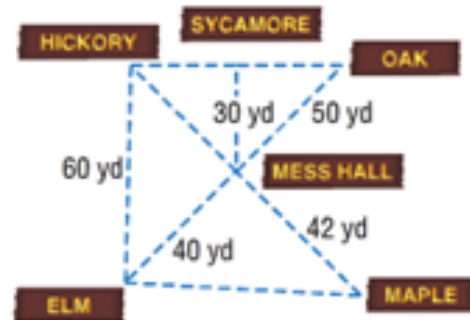# Pythagorean Theorem DAY 3

Int 1   **Context**   **Unit 7**

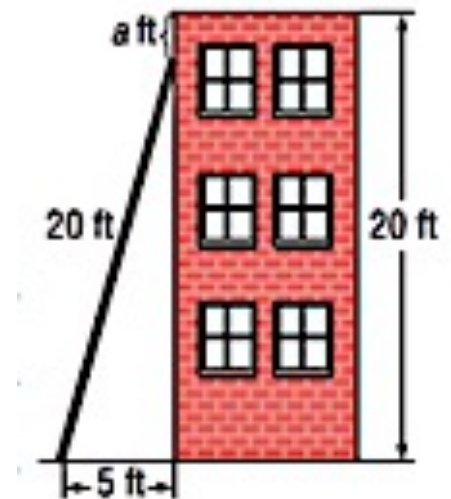Refer to the map of the Woodlands Camp at the right. Round your answers to the nearest tenth. Label units.

1.   How far is it from Sycamore cabin to Oak cabin?

2.   How far is it from Hickory, to the Mess Hall, to Elm?

3.   How far is it from Hickory straight to Elm?

4.   A camper in Hickory cabin wants to visit a friend in Elm cabin. How much farther is it if she walks to the Mess Hall first?

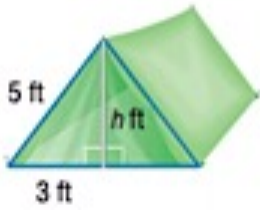**Suppose a ladder 20 feet long is placed against a vertical wall 20 feet high.**

5.   How far up the building is the top of the ladder?

6.   How tall is the building?

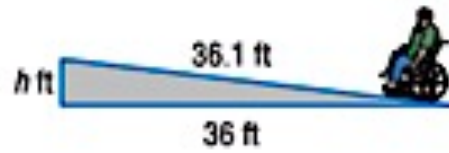7.   So how far from the top of the building is the ladder?

8.   A ladder 17 feet long is leaning against a wall. The bottom of the ladder is 8 feet from the base of the wall. How far up the wall is the top of the ladder? Round to the nearest tenth if necessary.

9.   Tara drives due north for 22 miles then east for 11 miles. How far is Tara from her starting point? Round to the nearest tenth if necessary.

Write an equation that can be used to answer the question. Then solve. Round to the nearest tenth if necessary. Label units.
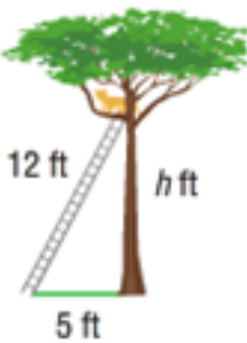
10.   What is the height of the tent?

5 ft

h ft

3 ft

11.   How high is the wheelchair ramp?
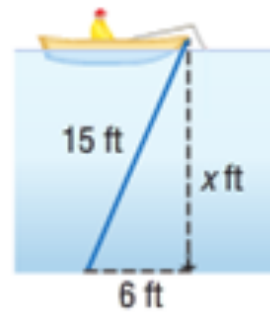

36.1 ft

h ft

36 ft

Write an equation that can be used to answer the question. Then solve. Round to the nearest tenth if necessary.

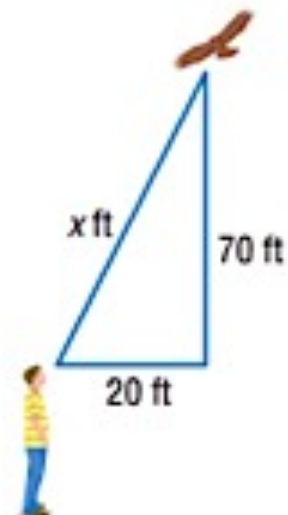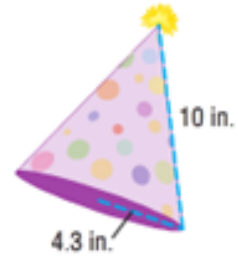**12.**   How far up the tree is the cat?

12 ft

h ft

5 ft

13.   How deep is the water?

15 ft

x ft

6 ft

14.   Write an equation to find how far the bird is from the boy. Then solve the equation. Round to the nearest tenth.

x ft

70 ft

20 ft

15. A party hat is in the shape of a cone with dimensions shown (radius = 4.3). Find the height of the hat. Round to the nearest tenth.
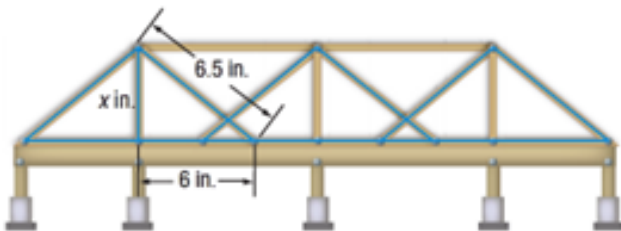
10 in.

4.3 in.

16. Larry wants to go from his house to his grandmother's house. How much distance is saved if he takes Main Street instead of Market and Exchange?

Grandmother's house

Main Street
5 blocks

Larry's house

Market Street
3 blocks

d blocks

Exchange Street

17. Suppose Greenville, Rock Hill, and Columbia form a right triangle. What is the distance from Columbia to Greenville? (Distance from Greenville to Rock Hill is 80 miles & Distance from Rock Hill to Columbia is 68 miles)

Greenville   80 mi   Rock Hill

68 mi

South Carolina

Columbia

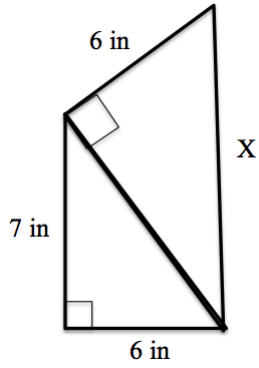**18.** Brayden is building the model bridge shown below.

6.5 in.

x in.

6 in.

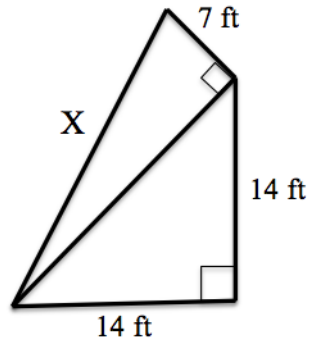How long must he cut the piece of wood for one of the vertical support beams?

Ⓕ 8.8 in.   Ⓗ 2.5 in.
Ⓖ 3 in.   Ⓘ 0.5 in.

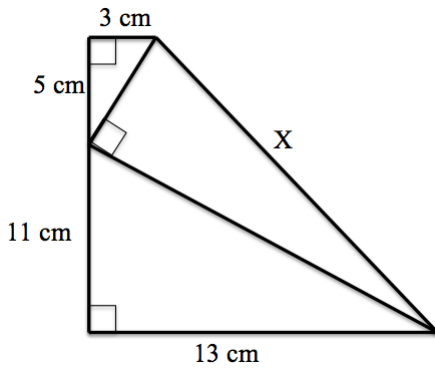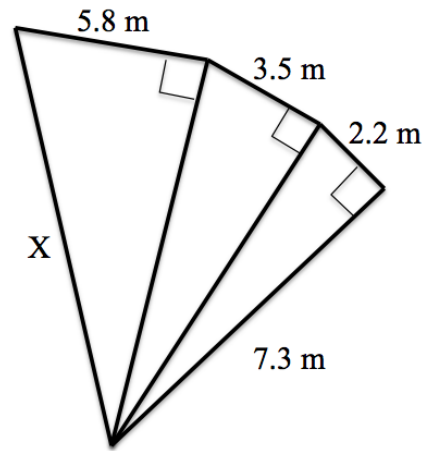Find the length of X in the connected right triangles below. Round to the tenth if necessary.

19.

6 in
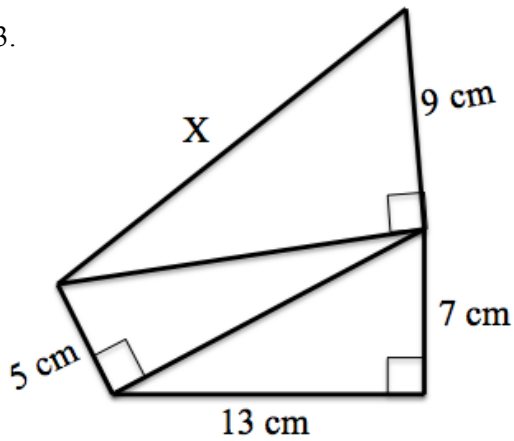
X

7 in

6 in

20.

7 ft

X

14 ft

14 ft

21.

3 cm

5 cm

X

11 cm

13 cm

22.

5.8 m

3.5 m

2.2 m

X

7.3 m

23.

9 cm

X

7 cm

5 cm

13 cm

24. Find the length of BC given the following lengths. Round your answer to the tenths place.
AD = 12 yards
BD = 13 yards
AC = 4.62 yards

A

D

C

B