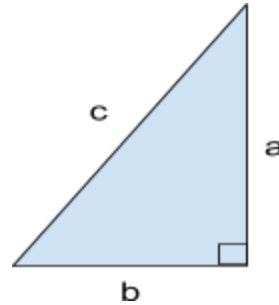**Pythagorean Theorem Work Stations**   **Name:** _____

Instructions:

- In partners/sets of three, you will be given a time frame of eight minutes per station to complete each given task.
- Once the bell sounds, you will move on to the next activity.
- Complete all calculations on this sheet.
- Show ALL work.

$$a^2 + b^2 = c^2$$

Station 1

Final Answer(s): _____

Station 2

Final Answer: _____

Station 3

Final Answer: _____
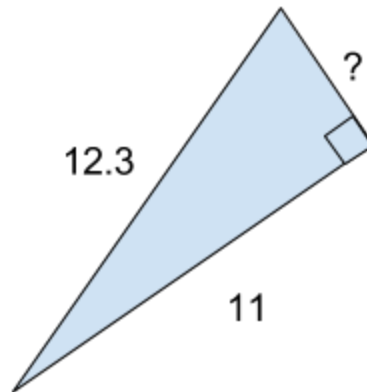
Station 4
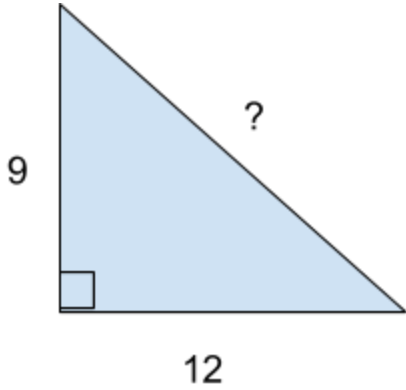

Final Answer: _____

Station 5

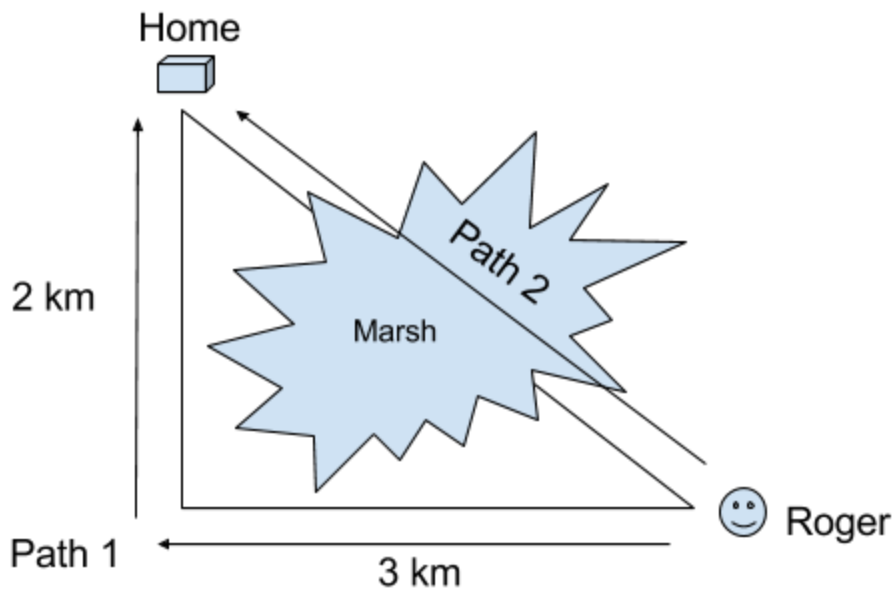**Station 6**

Final Answer: _____

Station #1

Solve for the missing sides. Round your final answer to the nearest TENTH.
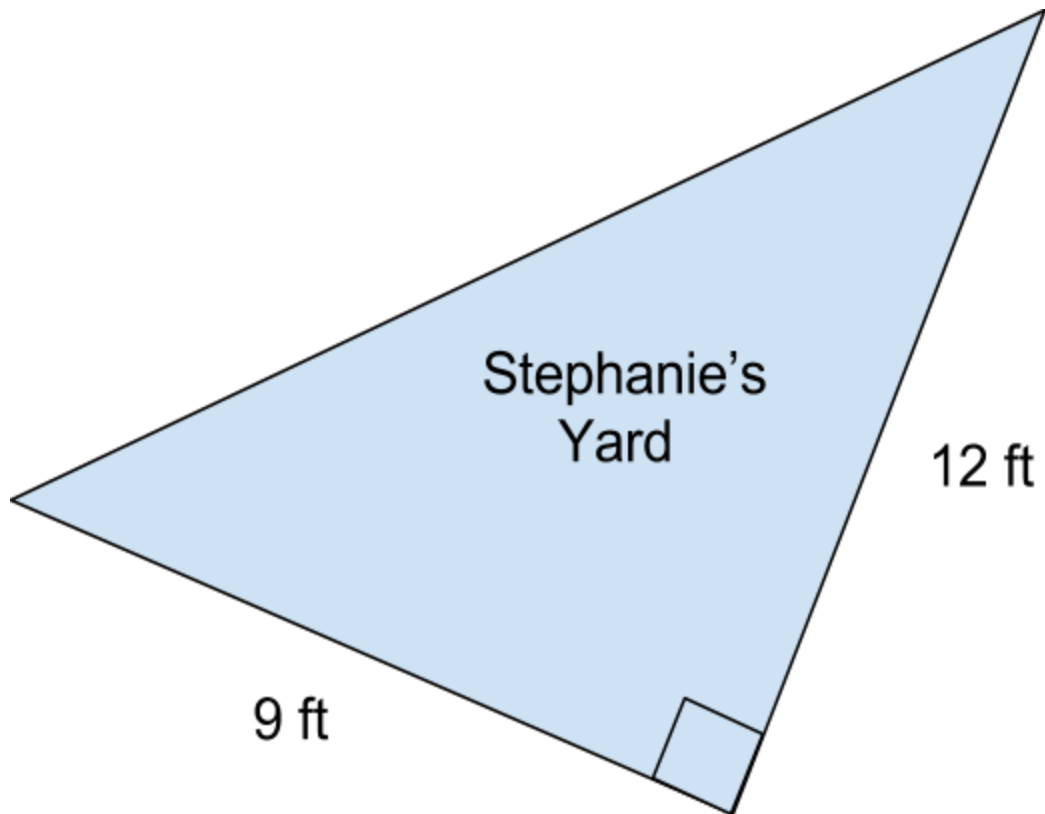
Station #2

Roger is running late to get home. He must choose between two paths.
Path one involves him walking 3 km west and 2 km south. If he chooses
this path he will be able to travel at a velocity of 6 km per hour. Path two
involves him moving directly from his current location to his house. This
path takes him through a marsh. On this path he can travel at a velocity of
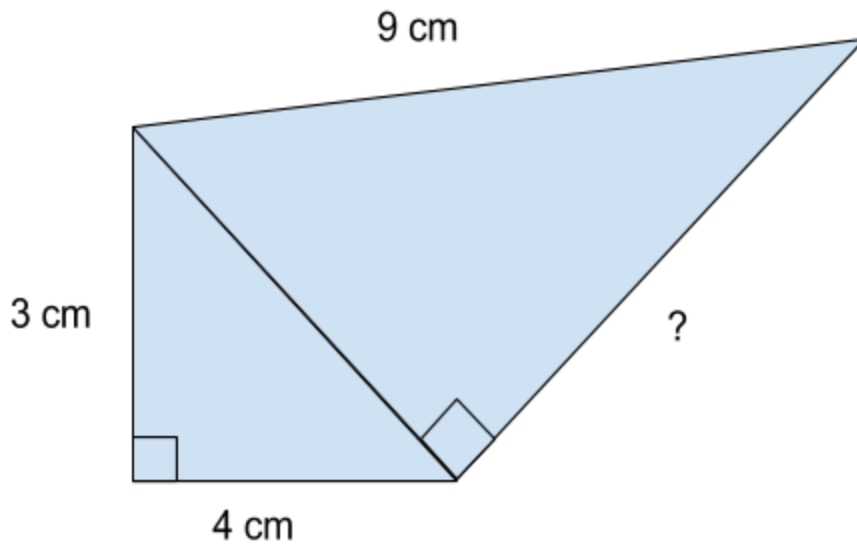4 km per hour. Which path gets him home first?

Home

Path 2

Marsh

2 km

Roger

Path 1

3 km

Station #3

Stephanie wants to build a fence around her yard. If the cost of fencing is 20.00 per foot, what will her total cost be? The dimensions of her yard are shown below.

Stephanie's
Yard

12 ft

9 ft

Station #4

Find the length indicated by ?.

Station 5

Draw a right angled triangle and label the legs, the right angle and the hypotenuse.

Explain Pythagorean Theorem using your diagram as part of your explanation. Be sure to show the relationship between the lengths of all sides of a right-angled triangle.

Station #6

Steven is given a right angled triangle. The length of one leg is 6 cm. The length of the hypotenuse is 14 cm.

1. Sketch a diagram of Steven's triangle.
2. Explain the steps he would take to find the length of the missing side.
3. Find the length of the missing side.