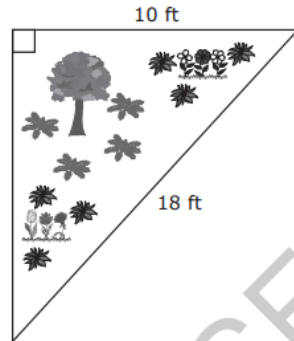


Pythagorean Theorem Study Guide

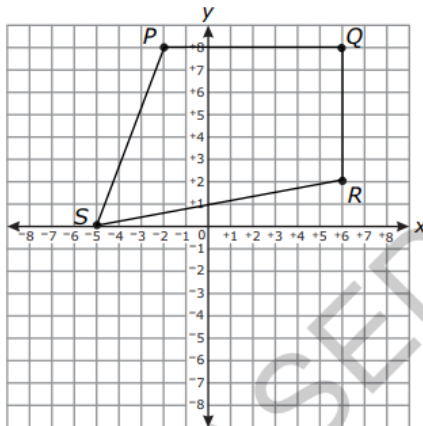
Molly wants to put a fence around an area. The fence will follow the diagram of the triangle shown below.



About how much fencing does Molly need?

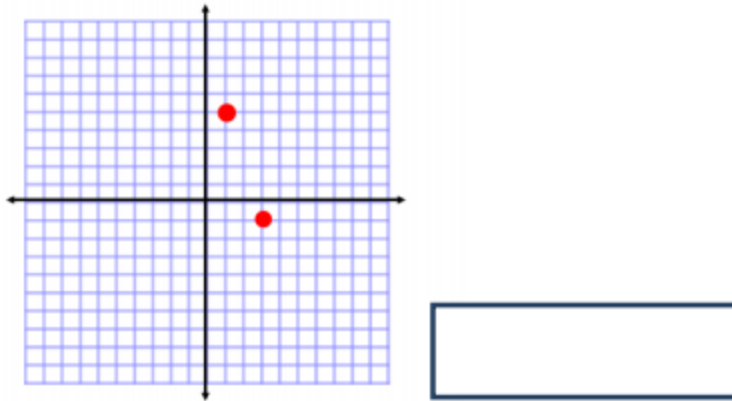
The points $(-3, -1)$ and $(-3, 5)$ are adjacent vertices of a rectangle. Two of the sides of the rectangle have a length of 8 units. What is the length of a diagonal of the rectangle?

Quadrilateral $PQRS$ is graphed in the coordinate plane.



To the nearest tenth, what is the perimeter of quadrilateral $PQRS$?

What is the distance between the two points? Round your answer to the nearest tenth. Write your answer in the box.



Select all of the following sets of side lengths that could create a right triangle that would be considered a Pythagorean Triple?

a. 3, 4, 7

c. 7, 24, 25

b. 16, 30, 34

d. 8, 9, 17

What is the distance between (6, 5) and (-4, 9)?

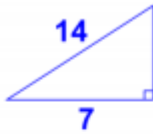
a. 10.8

c. 14.1

b. 13.0

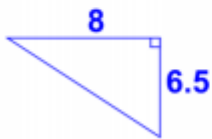
d. 12.1

What is the length of the third side?



- a. 7
- b. 147
- c. 12.1
- d. 15.7

What is the length of the third side?



- a. 106.3
- b. 10.3
- c. 4.7
- d. 3.8

You want to swim across a stream that is 150 feet wide. However as you swim the current carries you downstream and you end up 75 feet from where you wanted to be. How far did you actually swim?
(Round your answer to the nearest tenth.)

- i. Select all of the following three sets of numbers that would **not** be side lengths you could use to make a right triangle?
- a. 6, 8, 9
 - b. 15, 18, 17
 - c. 14, 19, 22
 - d. 16, 30, 34

A carpenter wants to build a right triangle shaped sand box. If he has three pieces of wood of lengths 8 feet, 12.4 feet and 9.5 feet can he do it?

A bird flies 13 miles due north, then flies 4 miles due east.

a) Draw a diagram to represent the situation.

b) How far did the bird fly?