**Real World Application of Pythagorean Th. Notes** Name \_\_\_\_\_\_\_\_\_\_\_\_\_

1. A tent is supported by a 6-foot pole and a stake that is 8-feet from the base of the tent. How long does the rope need to be that will be tethered from the top of the pole to the stake?

2. Sally is building a rectangular garden in her backyard. She would like to plant half of it with strawberries and half with green beans. To be creative, she cuts her garden diagonally. If the length of the garden is 10 feet and the width is 5 feet, how long will the diagonal be? (to the nearest tenth of a foot).

3. The hypotenuse of a triangle is 13 feet. The length of one side of the triangle is 12 feet. Find the perimeter and area of the triangle?

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**Pause the video and try the problems on your own!**

**Then press play and check your answers with a color pen.**

1. Joe’s gate to his fence is warped. He needs to add a brace to the diagonal in order to balance it out. If the fence is 6 feet tall and 3 feet wide, how long must the brace be? (to the nearest tenth of a foot).

2. Sam walked 25 feet across the diagonal of a field. He then walked 15 feet along the goal line. How far does Sam have to walk to get back to where he started?

3. The hypotenuse of a triangle is 5 feet. The length of one side of the triangle is 3 feet. Find the perimeter and area of the triangle?