

Looking for Pythagoras - Review LT1 & 2

Learning Target 1: I am able to apply the Pythagorean Theorem in a variety of situations.

Find the side length of each line segment.

1.) a segment whose points are
(3, 6) and (5, -2)

2.) a segment whose points are
(-5, 6) and (-2, 8)

3.) Draw a line segment with a length of:

a.) $\sqrt{18}$

b.) $\sqrt{65}$

Use the Pythagorean Theorem to find the missing side length of the right triangle.

4.) $c = 12$

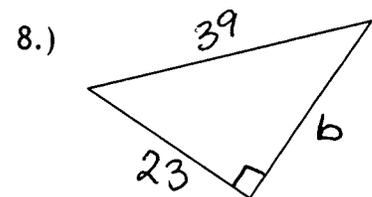
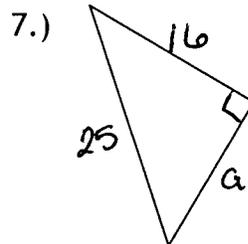
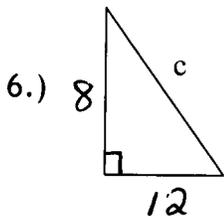
$b = 5$

$a = \underline{\hspace{2cm}}$

5.) $a = 4$

$b = \sqrt{17}$

$c = \underline{\hspace{2cm}}$



Determine if the triangle with sides of the given length is a right triangle.

9.) 12 ft, 9 ft, 16 ft

10.) 6 in, $\sqrt{72}$ in, 6 in

11.) $\sqrt{34}$ cm, 2 cm, 5 cm

Give the exact length of the line segment below.

12.)



13.) Your kite is at the end of its 85-foot string. In the sky, it is directly above a tree you know is 84 feet away. How high in the sky is your kite?

14.) A rectangular section of concrete to be poured requires a steel beam to support it across the diagonal. The rectangular section is 8' by 15'. How long must the diagonal support be?

15.) A 13-foot guy-wire is connected to a telephone pole 12 feet up from its base. How far away from the base of the telephone pole is the guy wire connected to the ground?

Learning Target 2:

(____ /16 pts. ____%)

I am able to use rational numbers and irrational numbers to compare and estimate values. *NO Calculator!

Find the length of the side of a square with the given area. (1 pt. each)

1.) 64 mi^2

2.) 625 yd^2

Find the two consecutive whole numbers that each square root is between. (1 pt. each)

3.) $\sqrt{72}$

4.) $\sqrt{348}$

Estimate each square root to one decimal place. (1 pt. each)

5.) $\sqrt{17}$

6.) $\sqrt{40}$

For each number sentence below, decide if it is true or false. (1 pt. each)

7.) $\sqrt{81} = 9$

8.) $\sqrt{64} = -8$

9.) $144 = \sqrt{12}$

Find the missing number. (1 pt. each)

10.) $\sqrt{\quad} = 22$

11.) $18 = \sqrt{\quad}$

12.) $\sqrt{36} = \underline{\quad}$

13.) Put the following set of numbers on the number line. (4 pts.)

$\sqrt{8}$

$\sqrt{4}$

$2\frac{5}{8}$

$-\frac{10}{5}$

$-\frac{1}{3}$

-1.9

$\sqrt{2}$

0.4

