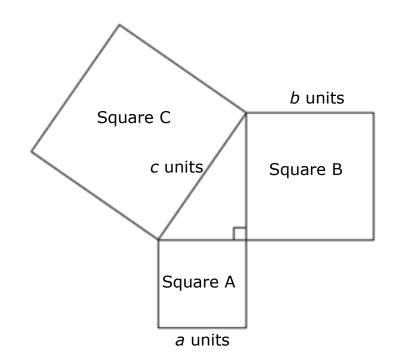
# Pythagorean Theorem Explain Independent Practice Answer Key

## Use the following figure for questions 1 - 3.



Use the figure above to complete the table.

	Area of Square A	Side Length of Square A	Area of Square B	Side Length of Square B	Area of Square C	Side Length of Square C
1	400 units <sup>2</sup>	20 units	441 units <sup>2</sup>	21 units		
2	144 units	12 units			1369 units <sup>2</sup>	37 units
3			16 units <sup>2</sup>	4 units	121 units <sup>2</sup>	11 units



#### Use the following information for questions 4-6.

For each of the following, determine if the lengths given would form a right triangle. Justify your answer using the Pythagorean Theorem.

- **4** 15 units, 36 units, 39 units
- **5** 6 units, 8 units, 9 units
- **6** 6.4 units, 12 units, 12.2 units

#### Use the following information for questions 7 and 8.

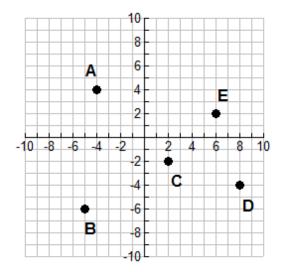
If a and b represent the length of the legs of a right triangle, and c represents the length of the hypotenuse, determine the missing value in each problem.

7 If a = 1.5 cm and b = 2cm, what is the length of c?

**8** If a = 6 ft. and c = 7.5 ft., what is the length of b?



### Use the graph for problems 9 – 12.



**9** Find the distance between point A and point B to the nearest tenth.

**10** Find the distance between point C and point D to the nearest tenth.

**11** Find the distance between point C and point E to the nearest tenth.

**12** Find the distance between point A and point D to the nearest tenth.

