Name_____ Date _____

Use the following figure for questions 1 – 3.

Square C

b units

c units

Square B
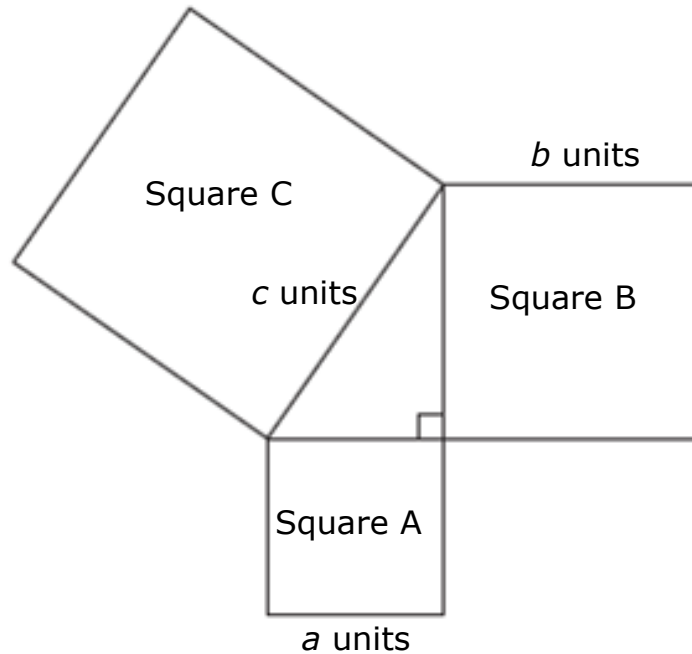
Square A

a units

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^2	20 units	441 units^2	21 units	***841 units^2***	***29 units***
2	144 units	12 units	***1225 units^2***	***35 units***	1369 units^2	37 units
3	***105 units^2***	***10.2 units***	16 units^2	4 units	121 units^2	11 units

Name_____ Date _____

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

      Yes, $15^2 + 36^2 = 1521$
               $39^2 = 1521$

   5   6 units, 8 units, 9 units

      No, $6^2 + 8^2 = 100$
              $9^2 = 81$

   6   6.4 units, 12 units, 12.2 units

      No, $6.4^2 + 12^2 = 184.96$
             $12.2^2 = 148.84$

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.

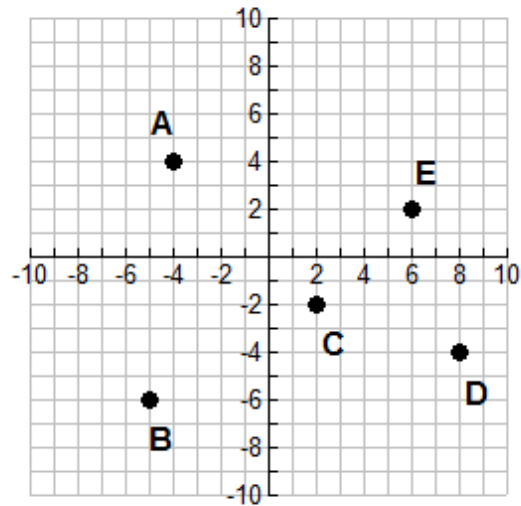   **7**   If *a* = 1.5 cm and *b* = 2cm, what is the length of *c*?

      2.5 cm

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

      4.5 ft.

Name_____ Date _____

Use the graph for problems 9 – 12.

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

10.0 units

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

6.3 units

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

5.7 units

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

14.4 units