

Looking for Pythagoras
Grade 8 Pre-Algebra Post-test 5 (2008)

8m 1n b1 o3a
8m 1n b1 o8a
8m 1n b2 o3b
8m 2a b1 o7
8m 2a b3 o2a
8m 6ps b1 o11

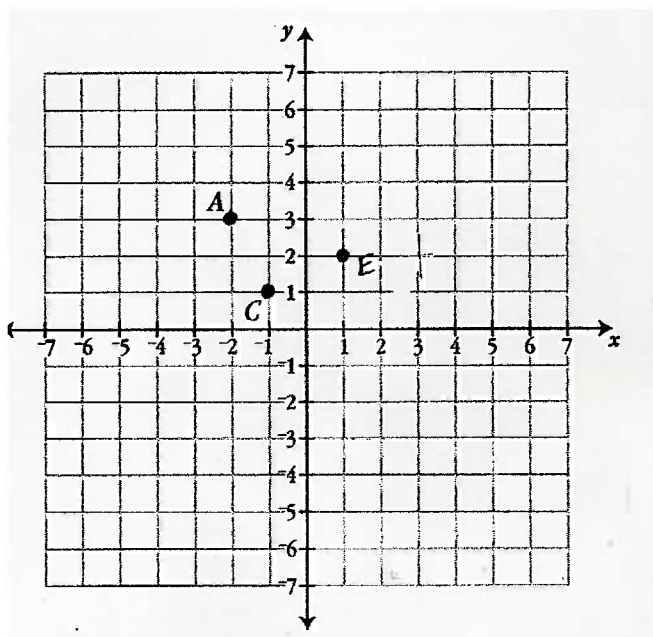
8m 1n b1 o7a
8m 1n b2 o1b
8m 1n b2 o4a
8m 2a b2 o1d
8m 2a b3 o2b

8m 1n b1 o7c
8m 1n b2 o2b
8m 1n b2 o6
8m 2a b2 o6a
8m 4m b2 o3b

Unit Test: Looking for Pythagoras

Name _____

1. a. The points A, C, and E are labeled on the grid below. Place a fourth vertex, S, to form a square.

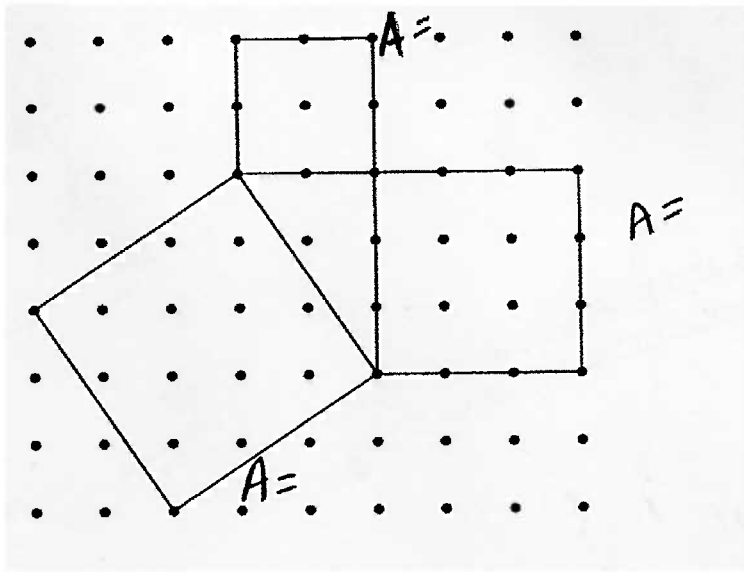


1. b. List the coordinates of each vertex. A (____, ____) C (____, ____) E (____, ____)
S (____, ____)

1. c. Explain how you decided where to put vertex S.

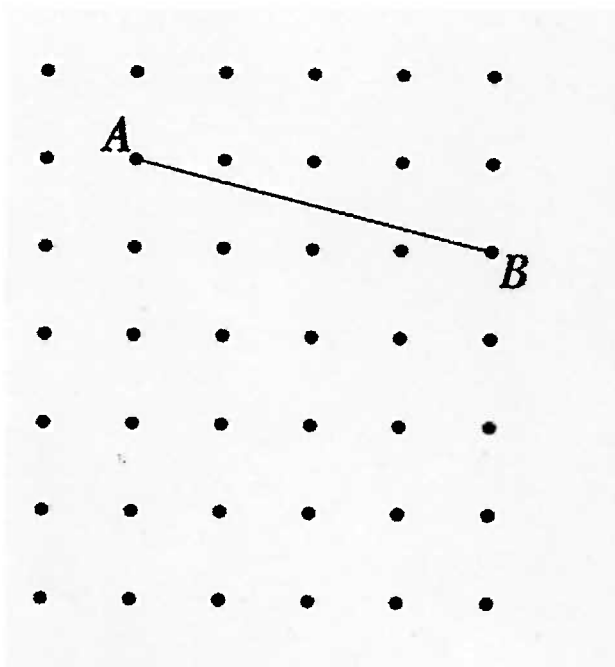
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2. a. Find the area of each square below.



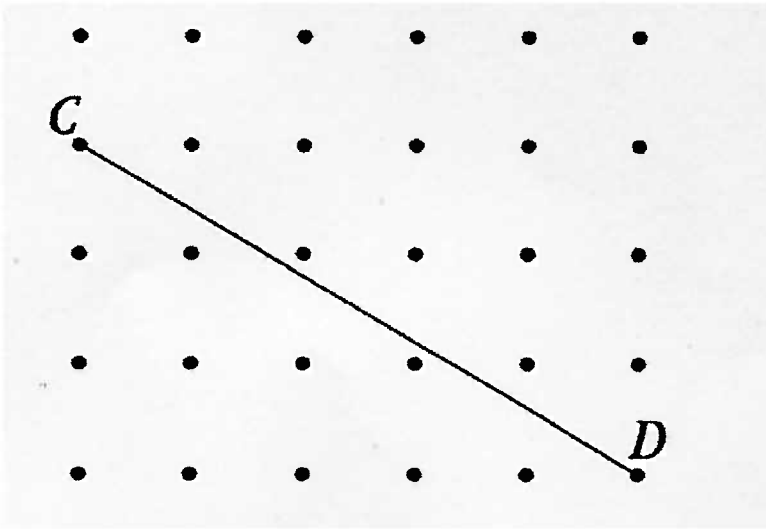
2. b. What is the relationship between the squares in the figure above?

3. Without using a ruler, find the length of line segment AB.

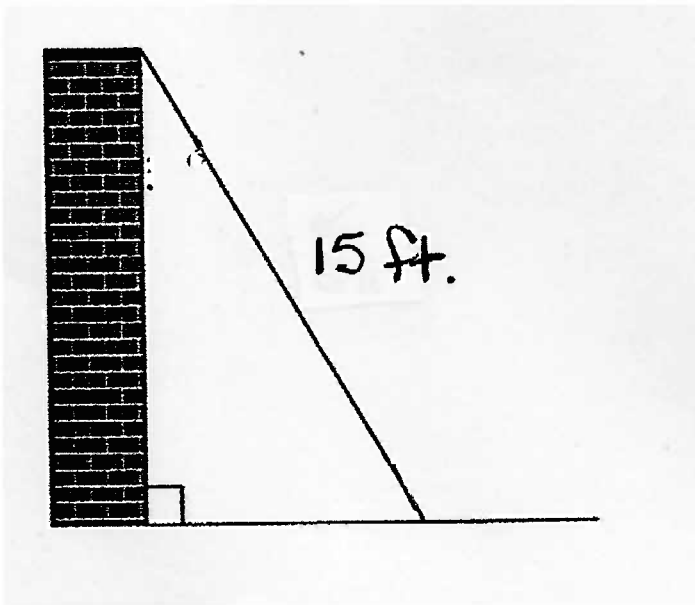


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4. Use the Pythagorean Theorem to find the length of line segment CD .



5. A ladder is leaning against the building below.



Find the height of the building and show your process.

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6. On the line, write the Pythagorean Formula. _____

In your own words, explain the Pythagorean Theorem. Be sure to use specific math language and be clear in the meaning for each variable and symbol used in the formula.

EXTRA CREDIT: Redbeard the Pirate's treasure is buried at one of the grid points shown below. It is a distance of 13 from X. Where could the treasure be???

