The leg of a right triangle has a length of 7 and a hypotenuse length of 15. Find the length of the other leg.

a. $\sqrt{176}$ units
b. $\sqrt{179}$ units
c. $\sqrt{178}$ units
d. $\sqrt{175}$ units

The legs of a right triangle are 10 units and 13 units. What is the length of the hypotenuse?

a. $\sqrt{270}$ units
b. 3 units
c. $\sqrt{269}$ units
d. 23 units

Denise correctly calculated the missing side length of one of these triangles using the Pythagorean Theorem. Which triangle is it?
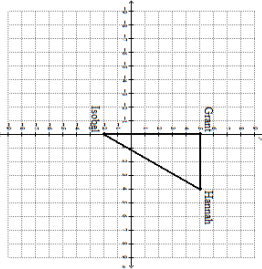

a. K
b. J
c. H
d. L

What is the distance in units from points C to D on the graph? Round your answer to the nearest hundredth if necessary.
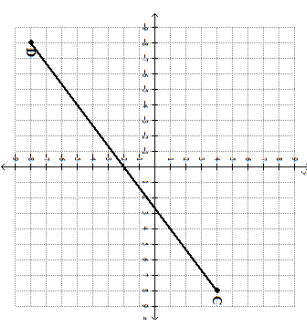
a. 20.1 units
b. 20 units
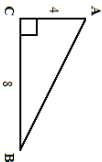c. 19.95 units
d. 19.85 units

1

The graph shows the location of Grant's, Hannah's, and Isobel's houses. Each unit on the graph represents 1 block.

If Grant walks from his house to Isobel's house, then on to Hannah's house along the path shown, how far will he have walked in blocks? Round your answer to the nearest tenth if necessary.

a. 17.1 blocks
b. 16.1 blocks
c. 12.1 blocks
d. 15.1 blocks

The sets of numbers 7, 24, 25 and 6, 8, 10 are Pythagorean triples. Use what you know about the Pythagorean Theorem and explain or show why they are Pythagorean triples. Be sure to show your work for each set of triples!

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Sarah and Johnny both tried to find the missing side of the right triangle.

Sarah's work	Johnny's work
$a^2 + b^2 = c^2$	$a^2 + b^2 = c^2$
$4^2 + b^2 = 8^2$	$4^2 + 8^2 = c^2$
$16 + b^2 = 64$	$16 + 64 = c^2$
$b^2 = 48$	$80 = c^2$
$\sqrt{b^2} = \sqrt{48}$	$\sqrt{80} = \sqrt{c^2}$
$b \approx 6.93$	$8.94 \approx c$

Is either of them correct? Explain your reasoning.

What is the distance in units from points C to D on the graph? Round your answer to the nearest hundredth if necessary.
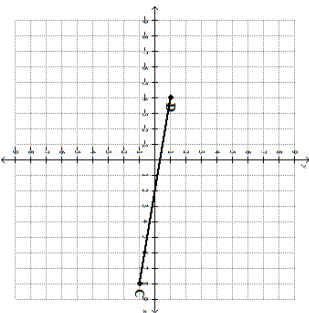
a. 12.32 units
b. 12.17 units
c. 12.22 units
d. 12.07 units