

calculator and come up with the point.
(2.8, 4.6).

Great
This is the correct point because the line that is perpendicular will always represent the shortest side because it is the most direct route. This can also be illustrated by what is known about right triangles. The hypotenuse will always be longer than each of the legs because its route is less direct.

This problem relates to problems #2/16, #4/16 + #5/16 as well as all other problems using perpendicular lines or perpendicular bisector to find the distance shortest distance between two points or the intersection between the two lines. After doing this problem and remembering the rule that the most direct distance between two points is the perpendicular "straight" line I have been able to apply what I learned to other problems, including but not limited to the ones mentioned above.

nic job - you justified your idea to use the \perp line very well.