NAME: $\qquad$ CLASS: $\qquad$
Geometry Lab 3
Finding Distance with Coordinates

1. Plot the points $\mathrm{A}(2,5), \mathrm{B}(7,17)$
2. Draw line segment AB .
3. Using $A B$ as the hypotenuse, construct a right triangle.
4. Call the third point of the right triangle point C.
5. Find the coordinates of C. C ( $\quad, \quad-\quad)$
6. Use the coordinates of $A, B$, and $C$ to find the length of the legs of the right triangle $A C$ and BC.
7. Use the Pythagorean Theorem to find the length of AB.
8. Write a formula for the length of the hypotenuse using the coordinates of points

> A, B and C and not the lengths of the legs, AC and BC.

