

## Investigation

**Distance Formula:** the distance between points  $A(x_1, y_1)$  and  $B(x_2, y_2)$  is given by

$$(AB)^2 = (x_2 - x_1)^2 + (y_2 - y_1)^2 \text{ or } AB = \sqrt{[(x_2 - x_1)^2 + (y_2 - y_1)^2]}$$