**The Distance Formula

The distance formula can be obtained by creating a triangle and using the Pythagorean Theorem to find the length of the hypotenuse. The hypotenuse of the triangle will be the distance between the two points.**

The subscripts refer to the first and second points; it doesn't matter which points you call first or second.

x2 and y2 are the x and y coordinates for one point
x1and y1 are the x and y coordinates for the second point
d is the distance between the two points

The Distance Formula





The Midpoint Formula



