# Macintosh HD:Users:Amit:Progs:ExcelerateLive:HTML:ml.png Excelerate Lesson Plan

**Distance Formula**

**About These Problems**

**The distance formula uses the Pythagorean theorem to find the distance between any two points. It creates a makeshift triangle between the points and then uses the Pythagorean theorem to find the distance between them.**

**Formula.**  d is the distance from (x1, y1) to (x2, y2)

d= ((y2 – y1)2 + (x2 – x1)2)(1/2)

**Question.**  Find the distance from (4,5) to (2,3).

1. (4,6)
2. (3,5)
3. (3,6)
4. (4,5)
5. (7,8)

**Answer.** **1**: Plug the points into the distance formula and solve.

((3 – 5)2 + (2 – 4)2)(1/2) = 8(1/2)