

Here is an example of digital working out from Shannon Bourke, also from 8MAT4. First he is using the distance formula:

$$4a = AB = \therefore d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$\therefore d = \sqrt{(-2 - 5)^2 + (3 - 2)^2}$$

$$\therefore d = \sqrt{(-7)^2 + (1)^2}$$

$$\therefore d = \sqrt{49 + 1}$$

$$\therefore d = \sqrt{50}$$

$$\therefore d = 7.0710678118654752$$

$$AB = 7.071$$

...and then he is using the gradient-intercept from of a line to plot the line:

