Length of line segment - Step-by-Step Lesson

Find the length of the line segment whose endpoints are:

(8, 5) and (4, -3)



Explanation:

We can use the distance formula to determine the length of this line:

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

Plug in our numbers:

$$d = \sqrt{(4-8)^2 + \{(-3) - 5\}^2}$$

$$d = \sqrt{(4)^2 + (8)^2}$$

$$d = \sqrt{16 + 64}$$

$$d\,=\,\sqrt{80}$$

$$d = 8.9$$

So, the answer is 8.9