

**Answer on Question #46961 – Math – Analytic Geometry**

**Question:**

Find the distance between the points to the nearest tenth.

$$L(-4, 11), \quad M(-3, 4)$$

**Solution.**

Recall the formula for determining distance between two points  $P_1(x_1, y_1)$  and  $P_2(x_2, y_2)$ :

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

In our case,  $x_1 = -4$ ,  $y_1 = 11$ ,  $x_2 = -3$ ,  $y_2 = 4$ . Thus,

$$d = \sqrt{(-3 - (-4))^2 + (4 - 11)^2} = \sqrt{1^2 + 7^2} = \sqrt{1 + 49} = \sqrt{50} \approx 7.071068 \approx 7.1.$$

**Answer.** The distance between points  $L(-4, 11)$  and  $M(-3, 4)$  is approximately equal to 7.1.