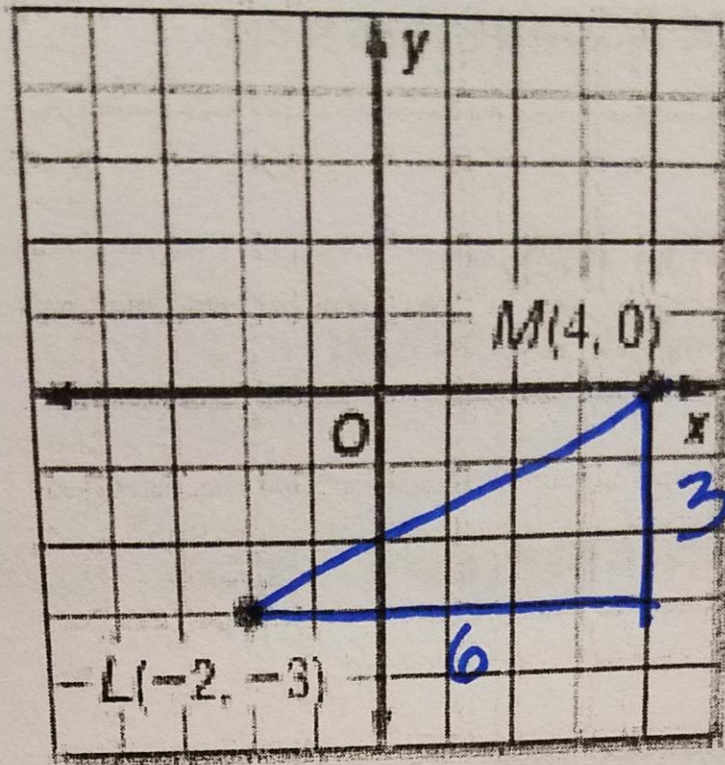


1.



$$\begin{aligned}3^2 + 6^2 &= c^2 \\9 + 36 &= c^2 \\45 &= c^2 \\\sqrt{45} &= c\end{aligned}$$

$$\begin{aligned}3\sqrt{5} \\ \text{or} \\ 6.7\end{aligned}$$

3. P(3, 4), Q(7, 2)

Distance Formula:

$$\sqrt{(3-7)^2 + (4-2)^2}$$

Exact Answer:  $2\sqrt{5}$

Approximate Answer: 4.5