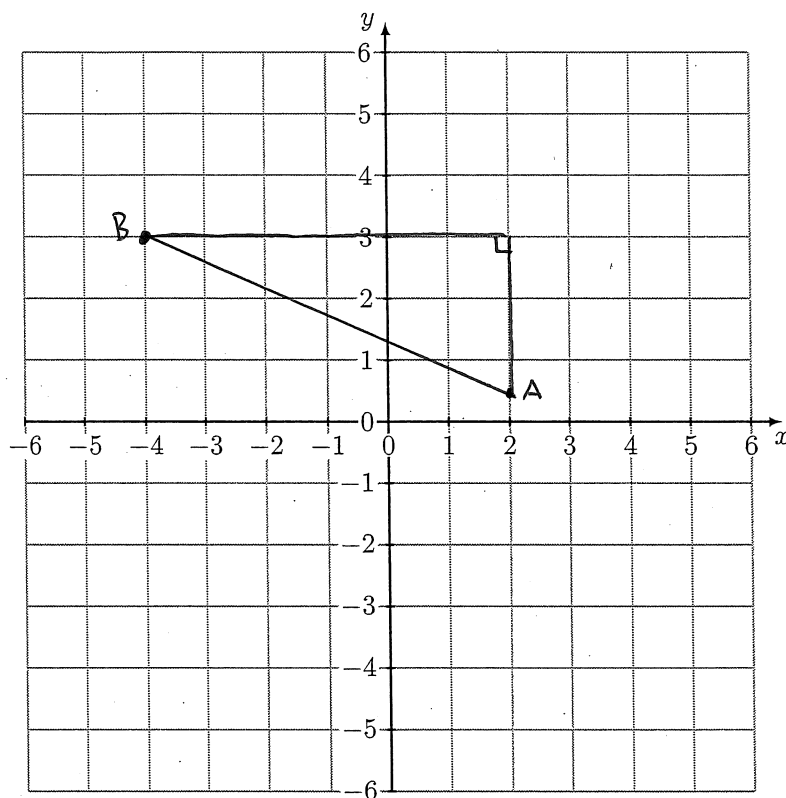


MA 202: Quiz 9

Tuesday 04/17/2018



1. On the coordinate plane above, plot the points $A = (2, 1/2)$ and $B = (-4, 3)$. (2 points).
2. On the coordinate plane above, draw a right triangle whose hypotenuse is the distance between A and B . (1 point)
3. Compute the distance between A and B (3 points).

$$\begin{aligned}d &= \sqrt{(y_2 - y_1)^2 + (x_2 - x_1)^2} \\&= \sqrt{(3 - \frac{1}{2})^2 + (-4 - 2)^2} \\&= \sqrt{(\frac{5}{2})^2 + 6^2} \quad \text{Or} \\&= \sqrt{\frac{25}{4} + 36} = \sqrt{6.25 + 36} = \sqrt{42.25} = 6.5 \\&= \sqrt{\frac{25 + 144}{4}} \\&= \sqrt{\frac{169}{4}} \\&= \sqrt{\frac{13^2}{2^2}} = \frac{13}{2} = 6.5\end{aligned}$$