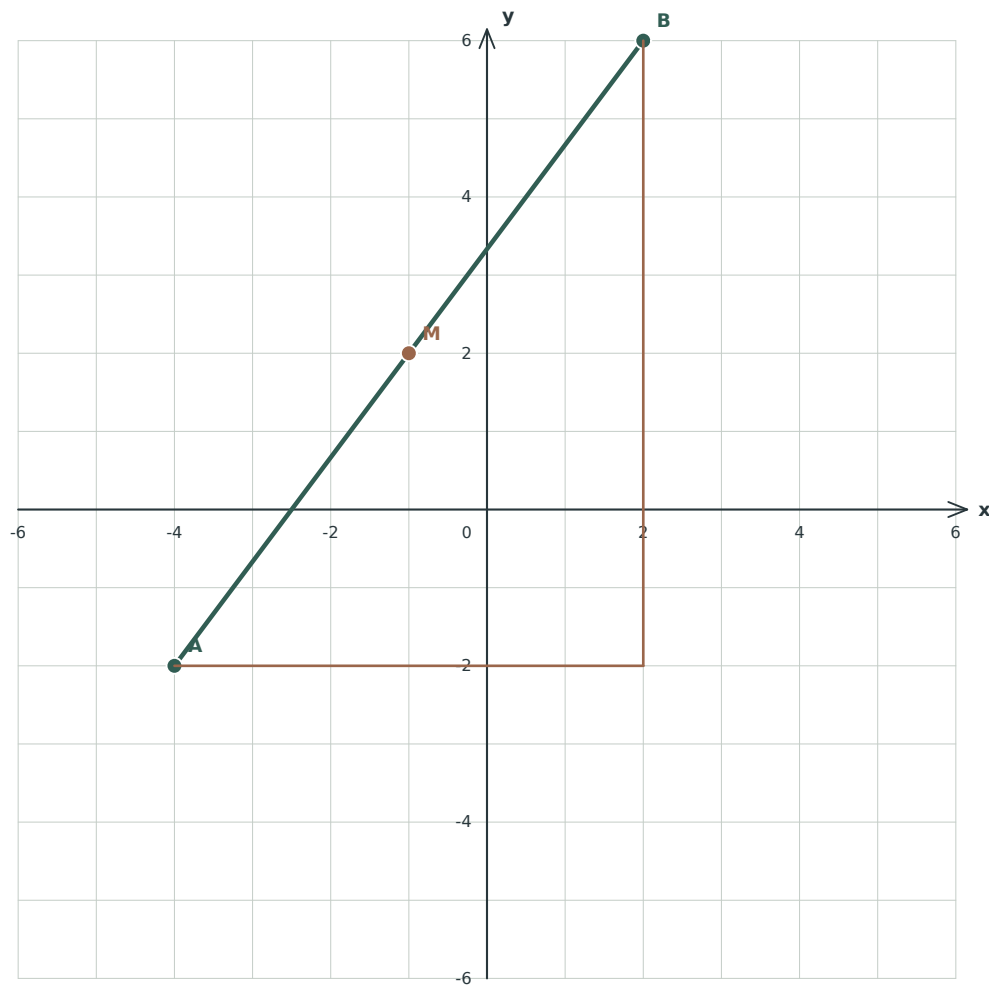


A six-by-eight displacement

Find the coordinate midpoint and straight-line distance. Do not measure the printed segment with a ruler to obtain coordinate units.

$$A = (-4, -2); B = (2, 6). M = ((x_A + x_B)/2, (y_A + y_B)/2). d = \sqrt{dx^2 + dy^2}.$$



1. Find and plot the midpoint M. $(-1, 2)$.
2. Calculate dx, dy and distance squared. $dx=6$, $dy=8$; $dx^2 + dy^2 = 100$.
3. State the nonnegative distance. 10 units.