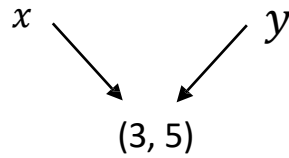


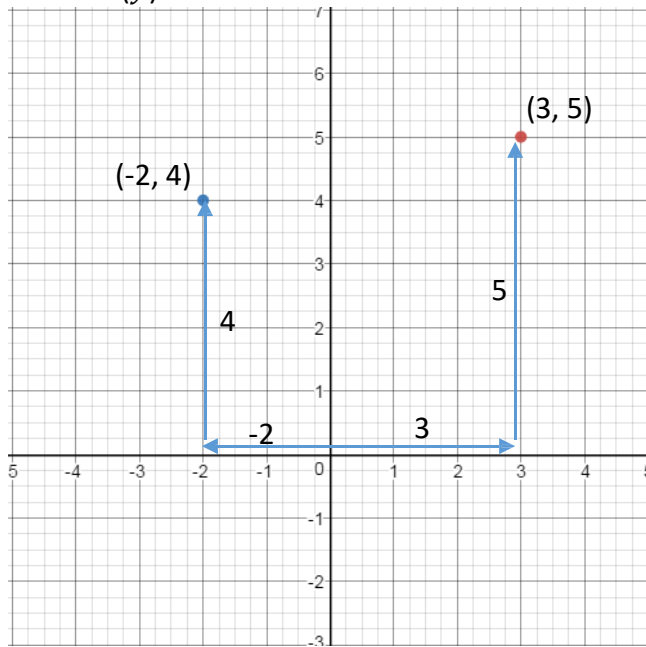


21 - Coordinates

Plotting



Each coordinate has an x -value and a y -value. This allows us to plot them on a graph. The x -coordinate is plotted on the horizontal (x) axis and the y -coordinate is plotted on the vertical (y) axis.

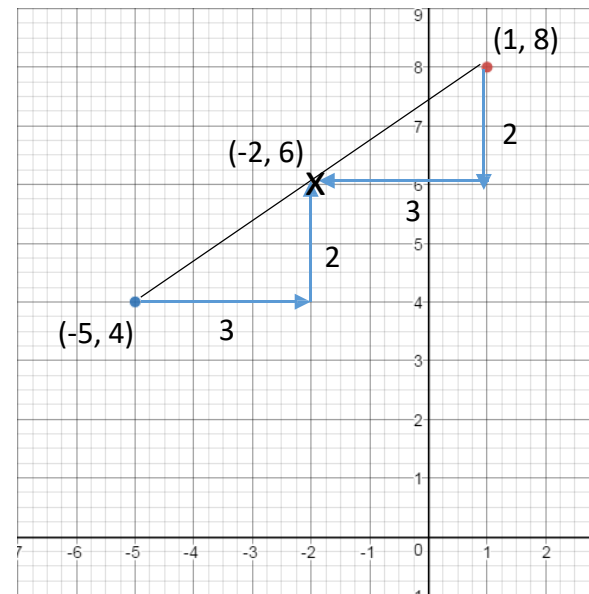


REMEMBER!
Always plot the x -coordinate first – think along the corridor, up the stairs.

Midpoints

The midpoint is the coordinate exactly in the middle of two points. We can either find this by using a graph or algebraically.

Graphically



Algebraically

Find the midpoint of $(7, -2)$ and $(3, 8)$.

$$x\text{-coordinate} = \frac{7+3}{2} = \frac{10}{2} = 5$$

$$y\text{-coordinate} = \frac{-2+8}{2} = \frac{6}{2} = 3$$

Midpoint = $(5, 3)$

Linked Prior Topics

Negative numbers, averages

Vocabulary

Coordinate, axis, vertical, horizontal, plot, midpoint

Linked Future Topics

Plotting linear graphs, plotting quadratic graphs, equation of a line