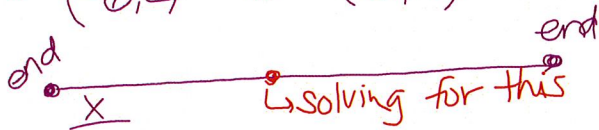


Finding midpoint

* gives you 2 endpoints

$$\frac{x_1 + x_2}{2} = M_x \quad \frac{y_1 + y_2}{2} = M_y$$

end (-6, 2) end (3, 4)



$$\frac{-6 + 3}{2} = M_x$$

$$\frac{-3}{2} = M_x$$

$$\frac{4 + 2}{2} = M_y$$

$$\frac{6}{2} = M_y$$

$$3 = M_y$$

Midpoint $(-\frac{3}{2}, 3)$

Finding Endpoint

* gives you 1 endpoint + midpoint

$$\frac{x_1 + x_2}{2} = M_x \quad \frac{y_1 + y_2}{2} = M_y$$

end (3, 5) mid (-4, 6)



$$\frac{3 + x}{2} = -4$$

$$3 + x = -8$$

$$+ \frac{-3}{-3} \quad \frac{-3}{-3}$$

$$x = -11$$

$$\frac{5 + y}{2} = 6$$

$$5 + y = 12$$

$$+ \frac{-5}{-5} \quad \frac{-5}{-5}$$

$$y = 7$$

Endpoint (-11, 7)