

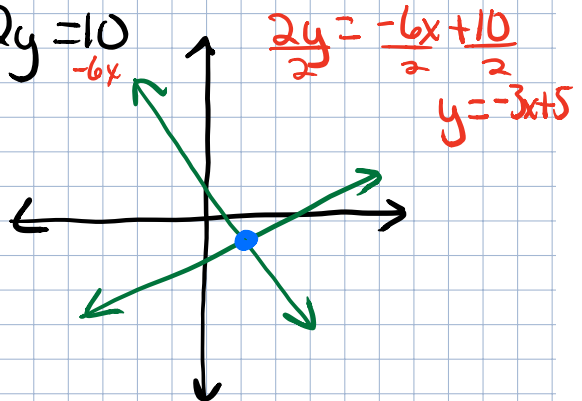
3/6/20

System 1

$$y = \frac{1}{2}x - 2$$

$$6x + 2y = 10$$

one solution



System 2

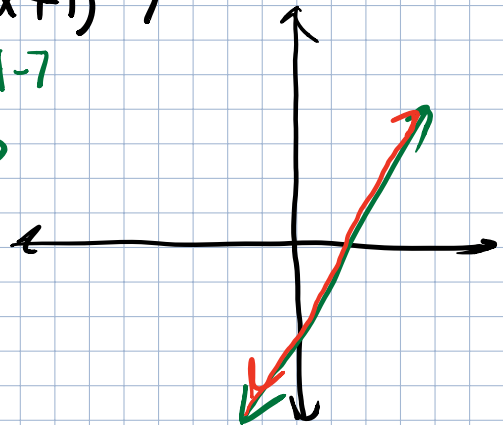
$$y = -3 + 4x$$

$$y = 4(x+1) - 7$$

$$y = 4x + 4 - 7$$

$$y = 4x - 3$$

infinitely many



System 3

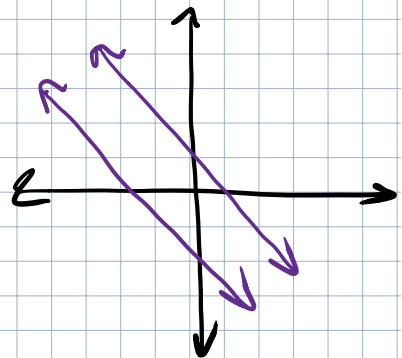
$$y = -\frac{2}{3}x - 1$$

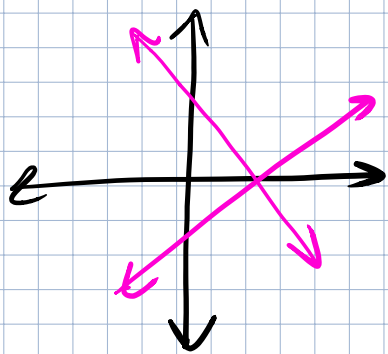
$$2x + 3y = 6$$

no solutions

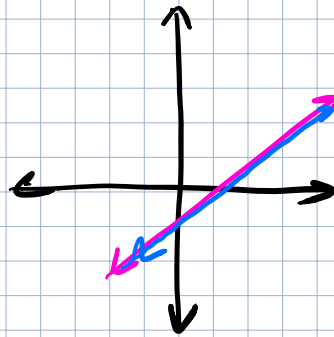
$$\frac{3y}{3} = \frac{-2x+6}{3}$$

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

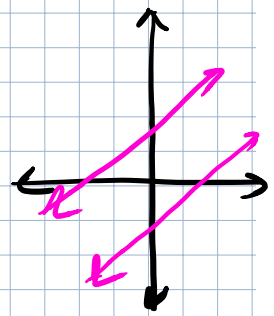




intersecting
(one solution)



same line
(all solutions)



parallel
(no solutions)

Parallel, Intersecting, or Same Line?

① $y = -3x + 4$
 $y = -5x + 3$
 parallel

② $y = -\frac{2}{3}x + 5$
 $y = 3x - 5$
 intersecting

③ $\frac{6}{6}y = \frac{15}{6}$ $y = 2.5$
 $\frac{10}{10}y = \frac{25}{10}$
 $y = 2.5$
 same line

