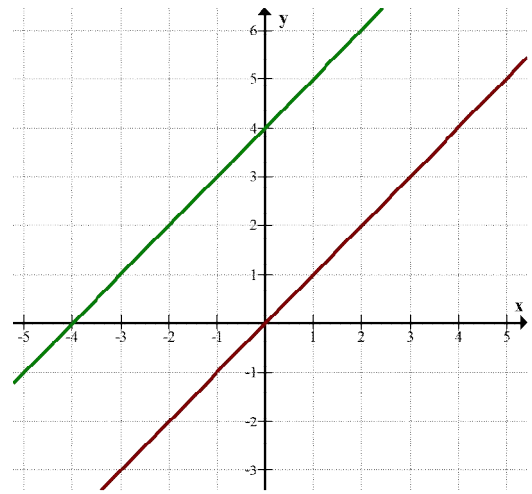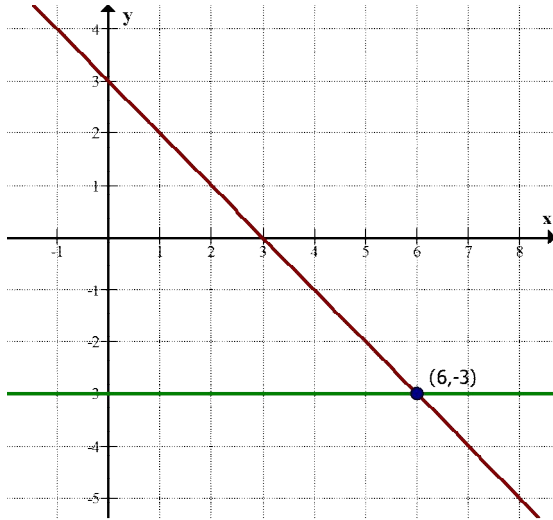# M10 - 8.1 - Number of Solutions Systems WS

How many solutions do the following graphs have.

(6,-3)

Find the number of solutions of the following equations.

$y = 2x - 3$
$y = x + 4$

$y = 3x - 8$
$y = 3x + 2$

$y = x + 1$
$y = x + 1$

$2x - y - 3 = 0$
$x - y + 4 = 0$

$6x - 2y = 16$
$6x - 2y + 4 = 0$

$6x + 2y - 6 = 0$
$y = -3x + 3$

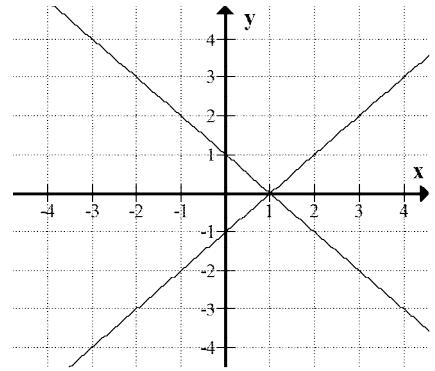In words, describe the graphs of two lines with the following outcomes.

Infinite number of solutions

No solution

One solution

Write the intersection point of the following graphs.
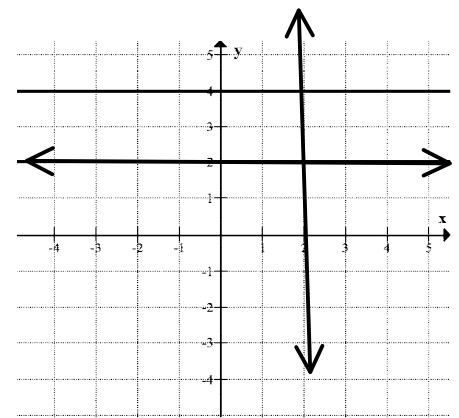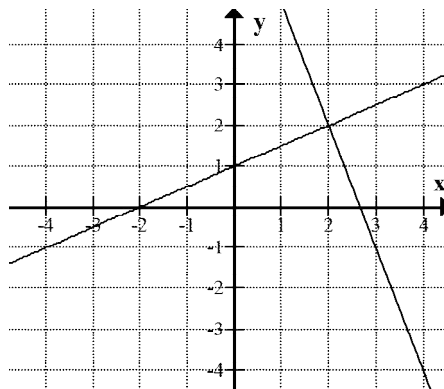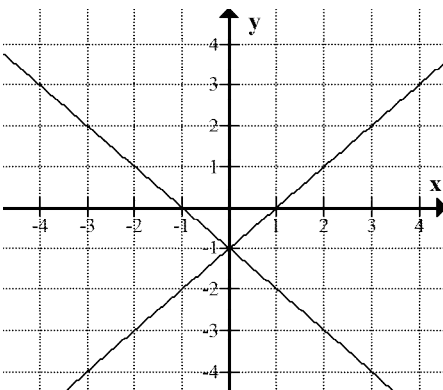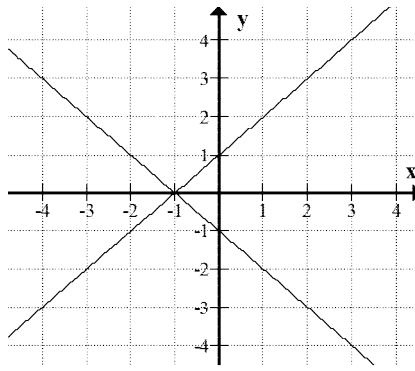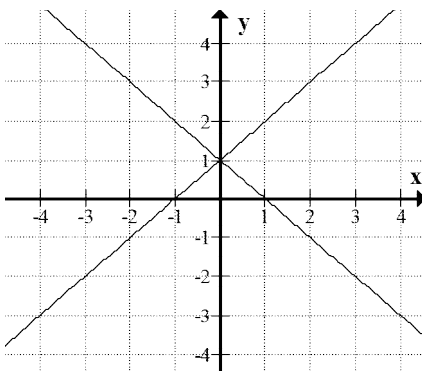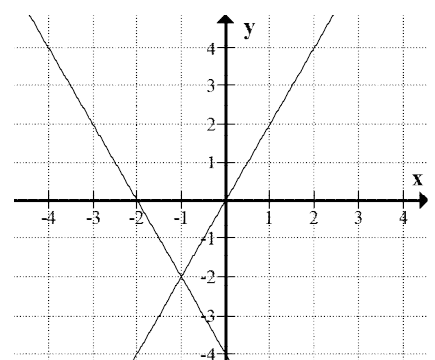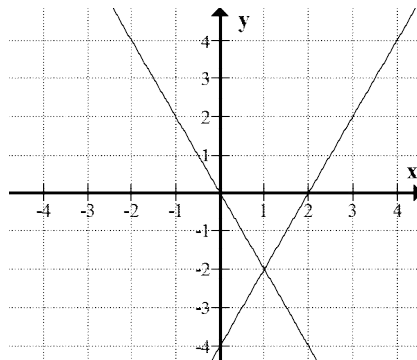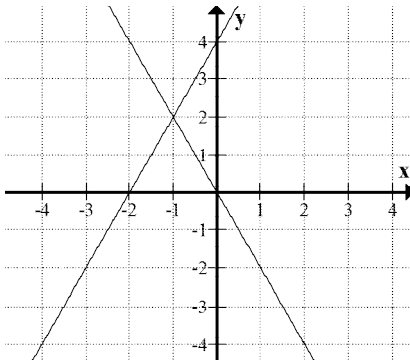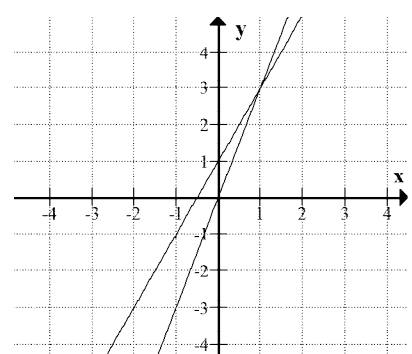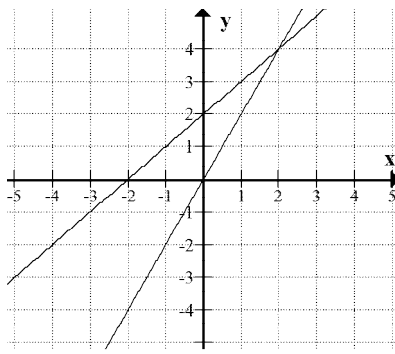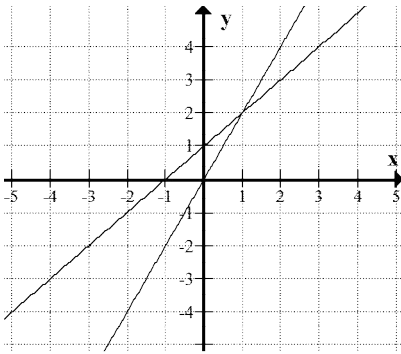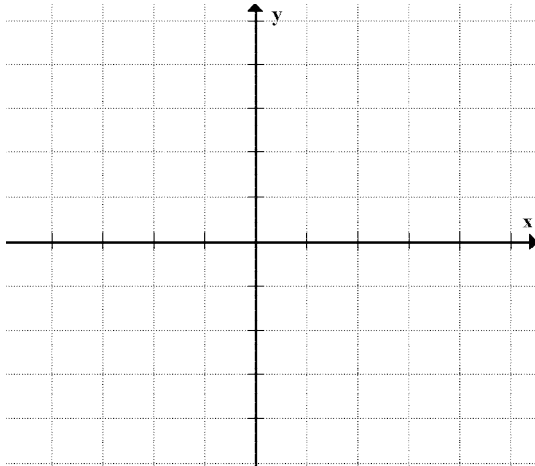
M10 - 8.2 - Solving Graphically WS

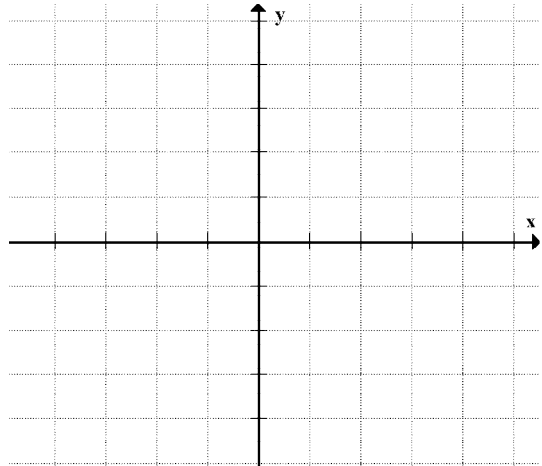**Solve for the intersection point by drawing the graphs.**
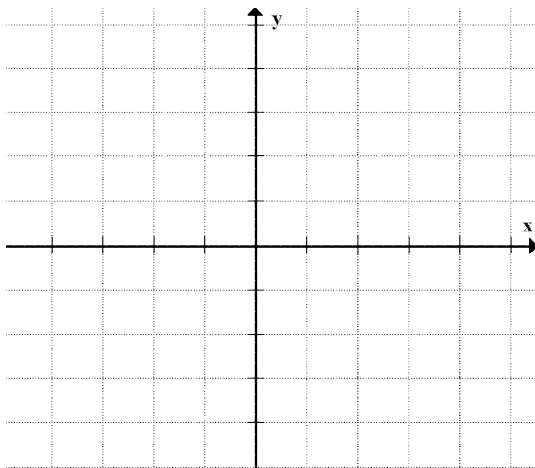
$y = 2x - 1$ $y = x$
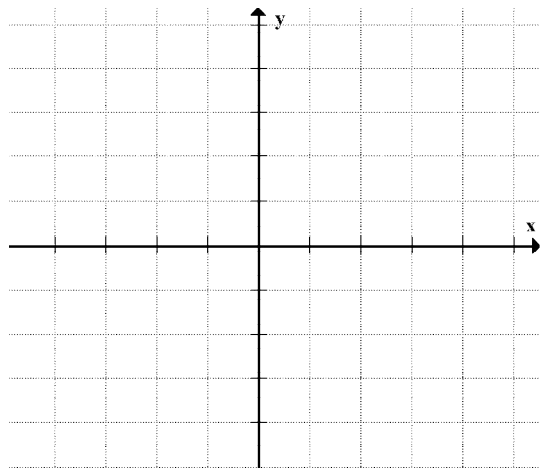
$y = 3x$ $y = x$

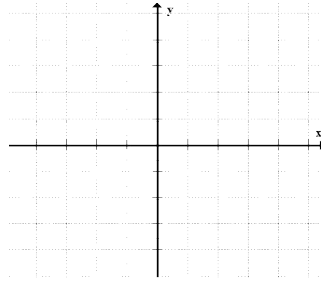$y = \dfrac{1}{2}x + 1$ $y = x - 1$
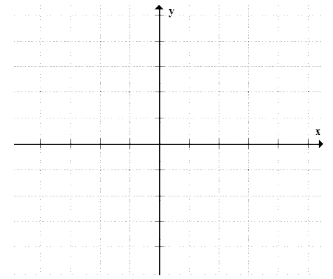
$y = x + 1$ $y = -2x + 4$

M10 - 8.3 - Algebra Solving Systems of Equations WS
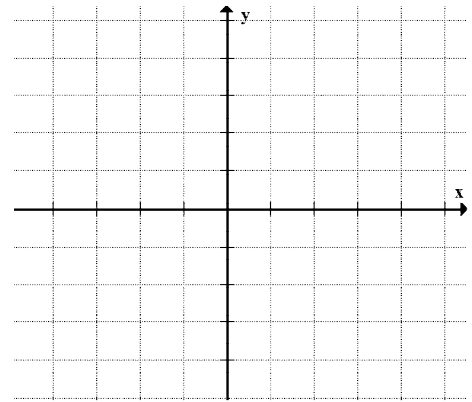
Is $(2,3)$ *a point on the line?*

$y = x + 1$

$y = -2x + 4$

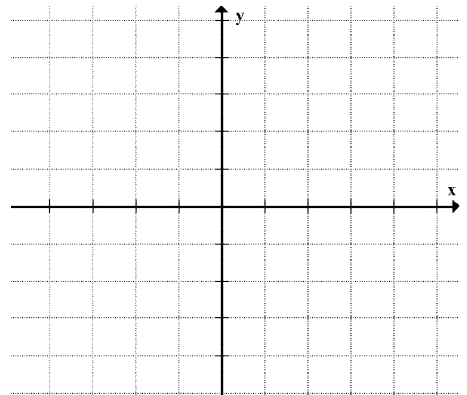*Is* $(-2,1)$ *the intersection of the following pairs of lines?*

$y = x + 3$ $\qquad\qquad$ $y = -3x - 5$

Is $(3,-2)$ *the intersection of the following pairs of lines?*

$y = x - 5$ $\qquad\qquad$ $y = 2x - 6$

Is $(5,-1)$ *the intersection of the following pairs of lines?*

$y = \dfrac{1}{2}x + 1$ $\qquad\qquad$ $y = -3x + 2$