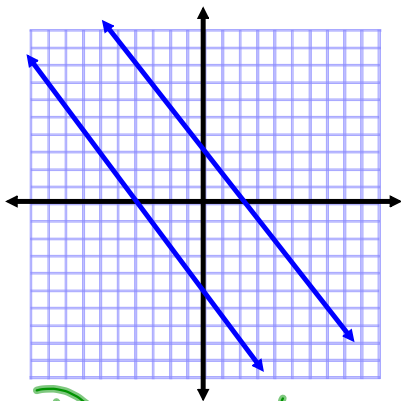


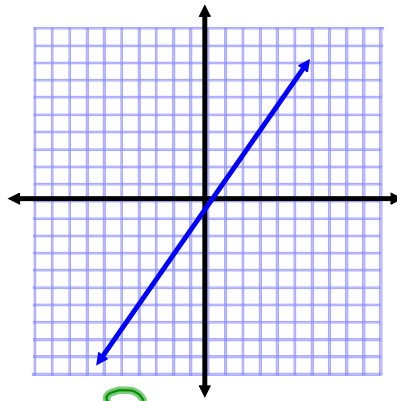
Intro to Ch. 7 - WS #3

Determine whether each system graphed below has one solution, no solution or an infinite number of solutions.



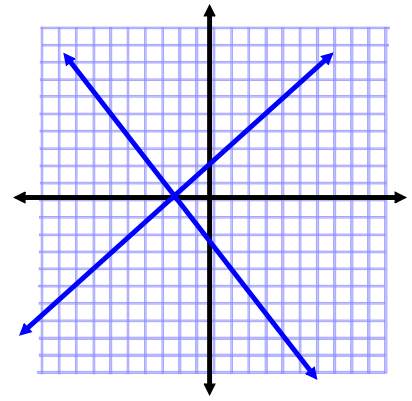
Parallel
- same slope
- diff y-int
- NO Solution

$\emptyset$



Same
- same slope
- same y-int
- Infinite # of Sol'n

∞



Intersect
- diff slopes
- y-int $\rightarrow$ same or diff

1 Sol'n
ordered pair

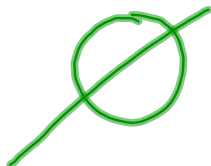
Determine the number of solutions for each system.

4. $y = \underline{3}x + 7$
 $y = \underline{2}x - 5$

Diff Slopes
Intersect
1 Sol'n

5. $y = 2x - 5$
 $y = 2x + 10$

Same Slopes
Diff y-int
 $\therefore$ Parallel

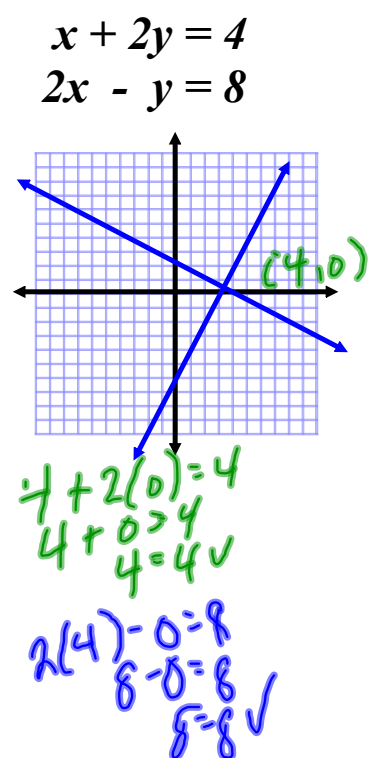
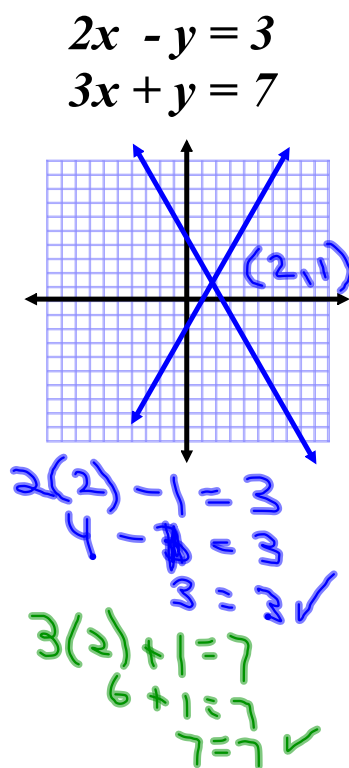
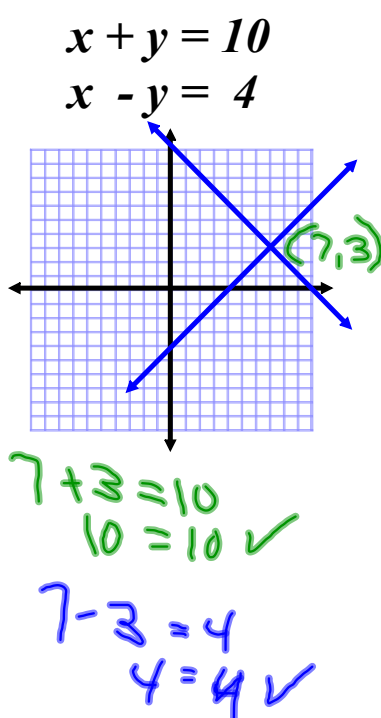


6. $\frac{2y}{\frac{2}{4}} = \frac{8}{\frac{2}{4}} - \frac{7x}{\frac{2}{4}}$
 $\frac{4y}{4} = \frac{16}{4} - \frac{14x}{4}$

$y = 4 - \frac{7}{2}x$
 $y = 4 - \frac{7}{2}x$

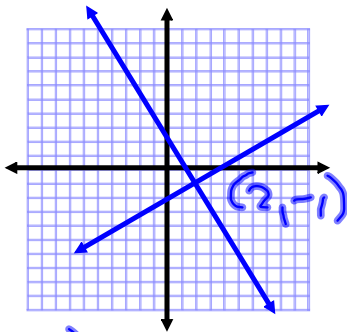
Same
 ∞

Read the solution set of each system of equations from its graph.
Check by substituting in both equations.



$$2x + y = 3$$

$$x - 3y = 5$$



$$2(2) - 1 = 3$$

$$4 - 1 = 3$$

$$3 = 3 \checkmark$$

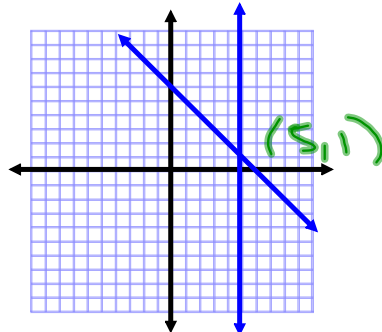
$$2 - 3(-1) = 5$$

$$2 + 3 = 5$$

$$5 = 5 \checkmark$$

$$x + y = 6$$

$$x = 5$$



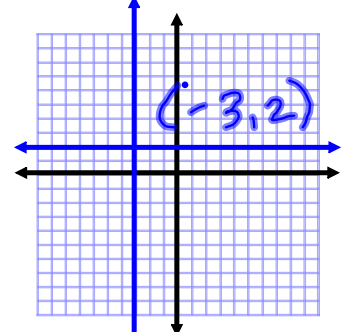
$$5 + 1 = 6$$

$$6 = 6 \checkmark$$

$$5 = 5 \checkmark$$

$$x = -3$$

$$y = 2$$



$$-3 = -3 \checkmark$$

$$2 = 2 \checkmark$$