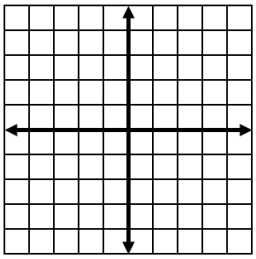
# Alg 1 Week 14 Tues Warm Up

Skill 6: Convert to slope intercept form and graph

$$x - 3y = 0$$



Skill 7: Write the equation of the line that passes through the given points in slope intercept form.

(0,-6) and (1,-3)

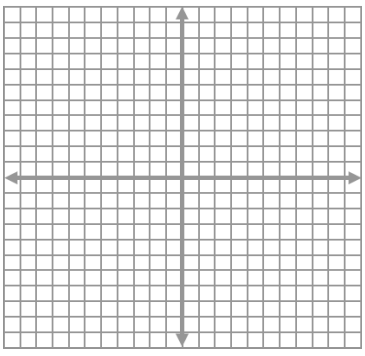
Skill 8: Write the equation of the line that is parallel to $y = -\frac{3}{2}x - 5$ and passes through (4,-1), in slope-intercept form.

Skill 9: Graph the two equations on the same grid. Find their intersection.

Line A: $y = 3x - 8$

Line B: $y + 8 = x$

Intersection point_____



Should the intersection point work on both lines? Why or why not?

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# Notes for 6-1 Solving Systems by Graphing

A system of equations that has at least one solution is **consistent.** A consistent system can be either *independent* or *dependent*.

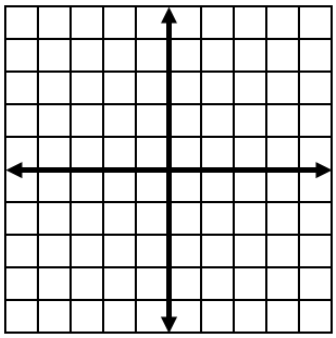
A consistent system that is **independent** has exactly one solution. For example, the systems in Problems 1 and 2 are consistent and independent. A consistent system that is **dependent** has infinitely many solutions.

A system of equations that has no solution is **inconsistent.**

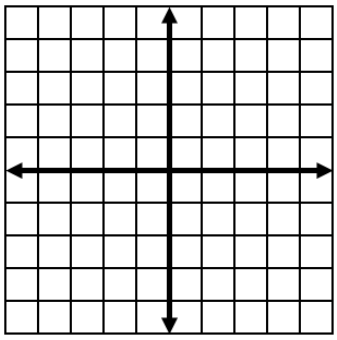
## Problem 3 Systems With Infinitely Many Solutions or No Solution

**What is the solution of each system? Use a graph.**

**A** $2y - x = 2$
$y = \frac{1}{2}x + 1$

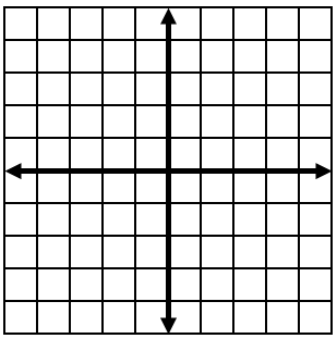


**B** $y = 2x + 2$
$y = 2x - 1$

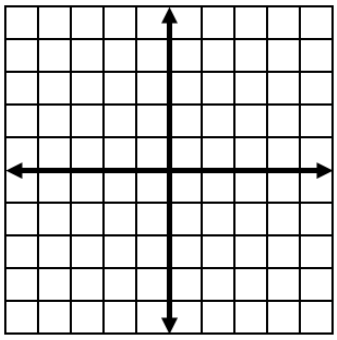


**Got It?** **3.** What is the solution of each system in parts (a) and (b)? Use a graph. Describe the number of solutions.

**a.** $y = -x - 3$
$y = -x + 5$



**b.** $y = 3x - 3$
$3y = 9x - 9$



**c. Reasoning** Before graphing the equations, how can you determine whether a system of equations has exactly one solution, infinitely many solutions, or no solution?

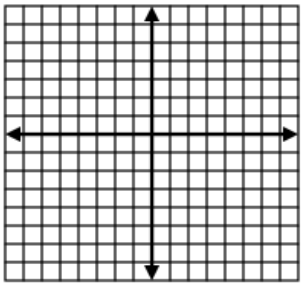
6.1C Algebra 1 Graphing Systems Practice #1, Wk14 Tues. HW

Label line A & B on your graphs

HW

Solve by graphing. Check your answer, if possible.

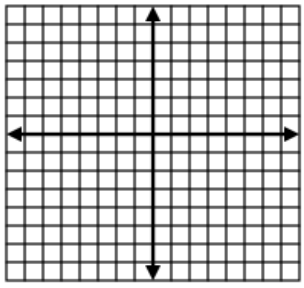
1. $y = 2x + 7$ Line A:
   $y = -\frac{3}{2}x$ Line B:



Solution:_____

Check:

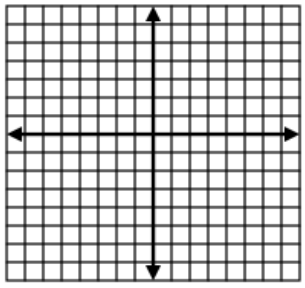
2. $y = \frac{2}{3}x - 1$ Line A:
   $x + 3y = 6$ Line B:



Solution:_____

Check:

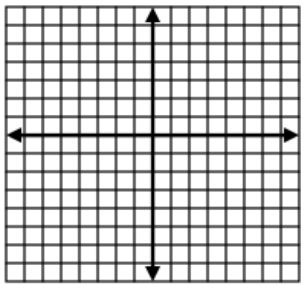
3. $y = -\frac{1}{2}x + 3$ Line A:
   $x + 2y = -2$ Line B:



Solution:_____

Check:

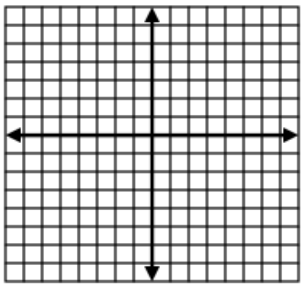
4. $x - 4y = 12$ Line A:
   $x + y = 2$ Line B:



Solution:_____

Check:

5. $y = 3x - 1$ Line A:
   $6x - 2y = 2$ Line B:



Solution:_____

Check: