

1. Self-assess your understanding of each Can You.
2. Solve each problem – look up problems you can't solve. Add to your notes if needed
3. Re-assess your understanding..

I Can ...

<p>Identify a solution to a system of equations. Is (2,3) a solution to the following systems of equations.</p> <p>a. $x + y = 9$ $2x - y = 5$ $2 + 3 \stackrel{?}{=} 9$ $5 \neq 9$ NO</p> <p>b. $4x - 2y = 2$ $3x + y = 9$ $4(2) - 2(3) \stackrel{?}{=} 2$ $2 = 2 \checkmark$ $3(2) + 3 \stackrel{?}{=} 9$ $9 = 9 \checkmark$ Yes</p> <p>c. $x - 5 = y$ $2x + 3y = 12$ $2 - 5 \stackrel{?}{=} 3$ $-3 \neq 3$ NO</p>	<p>Yes . Maybe No</p> <p>Re-assess Yes Maybe No Study:</p>
<p>Identify a solution to a system as infinite, no solution, or one solution. Create a system of equations for each system to have the following type of solution.</p> <p>a. infinite $y = 4x - 9$ $2y = 8x - 18$</p> <p>b. no solution $y = -5x + 6$ $y = -5x + 3$</p> <p>c. one solution $y = x + 3$ $x = 2$</p>	<p>Yes Maybe No</p> <p>Re-assess Yes Maybe No Study:</p>
<p>Solve a system of equations by graphing? Classify each system.</p> <p>a. $y = -2x + 7$ $y = 2x - 5$</p> <p>b. $x + y = 5$ $y = -x + 5$ $y = -x - 3$</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="129 1120 633 1601"> <p>solution (3, 1)</p> <p>independent</p> </div> <div data-bbox="714 1120 1120 1601"> <p>inconsistent</p> </div> </div>	<p>Yes Maybe No</p> <p>Re-assess Yes Maybe No Study:</p>
<p>Solve a system of equations by substitution? Classify each system.</p> <p>a. $x + y = 5$ $y = 2x - 3$ $y = -x + 5$ $-x + 5 = 2x - 3$ $-3x = -8$ $x = \frac{8}{3}$ $\frac{8}{3} + y = 5$ $\frac{8}{3} + y = \frac{15}{3}$ $y = \frac{7}{3}$ $(\frac{8}{3}, \frac{7}{3})$</p> <p>b. $2x - y = 3$ $x = y + 2$ $2(y + 2) - y = 3$ $2y + 4 - y = 3$ $y = -1$ $x = -1 + 2$ $x = 1$ $(1, -1)$</p>	<p>Yes Maybe No</p> <p>Re-assess Yes Maybe No Study:</p>

I Can ...

Solve a system of equations by elimination? Classify each system.

a. $4x - 2y = 8$
 $2(-2x + y = 6)$
 $-4x + 2y = 12$
 $0 \neq 20$
 No Solution
 inconsistent

b. $4(4x + 3y = 20)$
 $3(9x - 4y = 2)$
 $16x + 12y = 80$
 $27x - 12y = 6$
 $43x = 86$
 $x = 2$
 independent (2, 4)

Yes Maybe No

c. $2x + 3y = 12$
 $-2x + 3y = 6$
 $6y = 18$
 $y = 3$
 $2x + 3(3) = 12$
 $2x + 9 = 12$
 $2x = 3$
 $x = 3/2$
 $(3/2, 3)$
 independent
 consistent

d. $2(3x - y = 8)$
 $-6x + 2y = -16$
 $6x - 2y = 16$
 $0 = 0$
 *Dependant

Re-assess
 Yes Maybe No
 Study:

Without graphing, determine whether two lines are consistent, inconsistent / dependent or independent?

a. $3x - 4y = 28$
 $-6x + 8y = 32$
 inconsistent

b. Given the line $y = 3x + 5$.
 Give an equation so that the system is

a. dependent
 $2y = 6x + 10$
 b. consistent and independent
 $y = \frac{1}{3}x + 5$

Yes Maybe No

Re-assess
 Yes Maybe No
 Study:

Write a system of equations to solve a problem.

a. Two different families bought general admission tickets for a Reno Aces baseball game. One family paid \$45 for 5 adults and 2 children. The other family paid \$39 for 2 adults and 5 children. Write a system to represent the problem and solve.

let $\begin{cases} x = \text{adults} \\ y = \text{children} \end{cases}$
 $\begin{cases} 5x + 2y = 45 \\ 2x + 5y = 39 \end{cases}$
 $\begin{cases} 10x + 4y = 90 \\ -10x + 25y = -195 \end{cases}$
 $\begin{cases} y = 5 \\ x = 7 \end{cases}$

b. The admission fee at a small fair is \$1.50 for children and \$4.00 for adults. On a certain day, 2200 people enter the fair and \$5050 is collected. How many children and how many adults attended?

let $\begin{cases} x = \text{children} \\ y = \text{adults} \end{cases}$
 $\begin{cases} x + y = 2200 \\ 1.5x + 4y = 5050 \end{cases}$

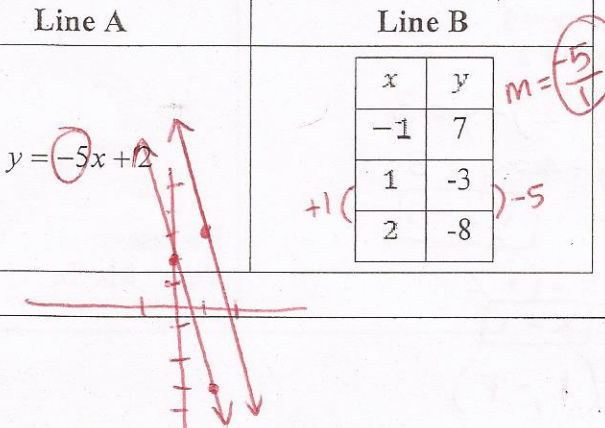
Yes Maybe No

Re-assess
 Yes Maybe No
 Study:

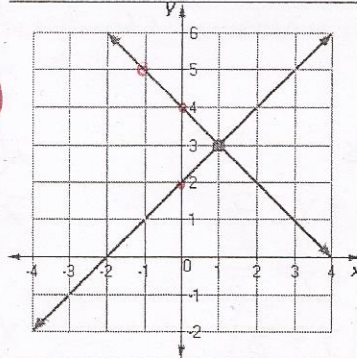
Extra practice.

Line A and Line B represent a system. What is the solution?

Line A	Line B								
$y = -5x + 12$	<table border="1"> <tr><th>x</th><th>y</th></tr> <tr><td>-1</td><td>7</td></tr> <tr><td>1</td><td>-3</td></tr> <tr><td>2</td><td>-8</td></tr> </table>	x	y	-1	7	1	-3	2	-8
x	y								
-1	7								
1	-3								
2	-8								



Write the system of equations represented by the following graph.



$\begin{cases} y = x + 2 \\ y = -x + 4 \end{cases}$