

Name_____

Hour_____

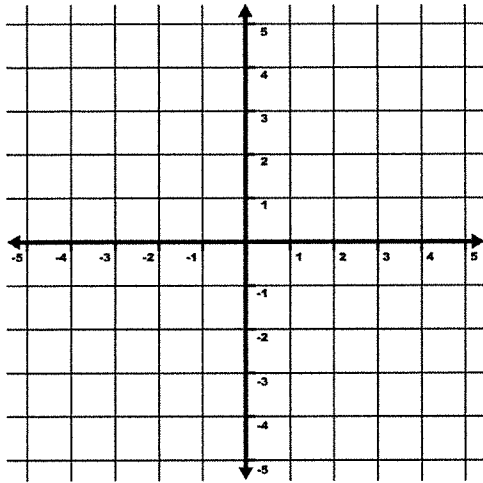
Systems of Equations Review

I can solve systems by graphing

Graph the equations by hand and find the solution.

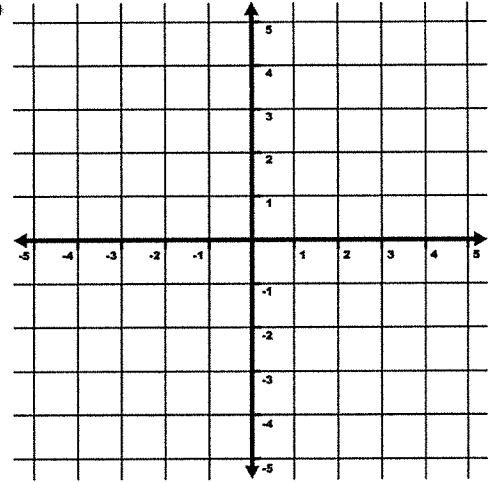
$$y = x - 1$$

$$y = x + 1$$



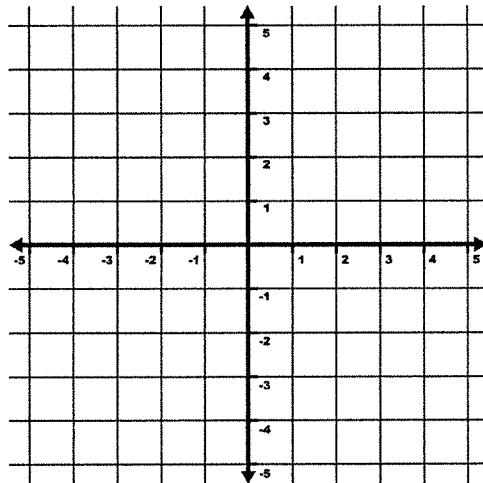
$$y = -2x - 3$$

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



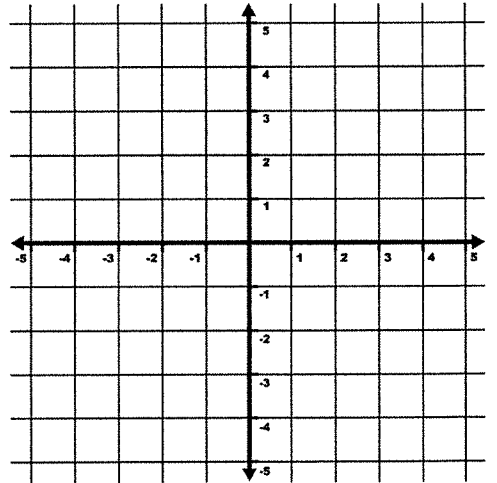
$$y = \frac{1}{2}x + 1$$

$$y = -\frac{1}{4}x - 2$$



$$y = -\frac{1}{2}x - 4$$

$$y = \frac{5}{2}x + 2$$



Graph the equations on the calculator and find the solution

$$y = 4x + 3$$

$$y = -2x + 9$$

$$y = -\frac{3}{2}x + 4$$

$$y = \frac{5}{4}x - 7$$

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

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

$$y = \frac{3}{7}x + 8$$

$$y = -\frac{13}{7}x - 8$$

$$y = \frac{13}{7}x - 8$$

$$y = \frac{13}{7}x - 1$$

I can solve systems by substitution

$y = 2x$ $-6x + 3y = 0$	$-2x - 6y = 0$ $y = -8x - 23$	$y = -8x + 8$ $4x - 2y = 4$
$-2x - 4y = 14$ $y = -4x - 21$	$y = -2x - 6$ $6x + 3y = -5$	$-7x + 3y = 19$ $y = -4x$

I can solve systems by elimination

$6x - 7y = 1$ $6x - 4y = -20$	$-10x + 2y = -30$ $-10x + 2y = -30$	$2x - 8y = 2$ $8x - 8y = 8$
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$-x - 4y = -1$ $-8x - y = -8$	$9x + 2y = -10$ $-36x - 8y = 12$	$7x - 4y = -5$ $14x - 6y = 10$
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I can solve using any method

$y = -\frac{1}{3}x + 6$ $y = -4x - 5$	$4x - 2y = -18$ $y = 6x + 21$
$-3x + 3y = -21$ $y = x - 7$	$14x - 4y = 6$ $-7x + 5y = 24$

I can system of equation word problems

Ali's school is selling tickets to the spring musical. On the first day of ticket sales the school sold 5 senior citizen tickets and 4 child tickets for a total of \$98. The school made \$278 on the second day by selling 11 senior citizen tickets and 14 child tickets. Find the price of a senior citizen ticket and the price of a child ticket.

Several students decide to start a T-shirt company. After initial expenses for \$280, they purchase each T-shirt wholesale for \$3.99. They sell each t-shirt for \$10.99. How many must they sell to break even?

Olivia's family drove to Disney World for spring break. Her mom and dad shared the driving duties for a total of 14 hours. Her mom drove 65 miles per hour, and her dad drove 60 miles per hour. If they drove a total of 895 miles, how many hours did each person drive for?

Apple is selling used iPhones for \$150. Apple's expenses to repair the used phones cost \$1000 for parts and \$100 per phone for labor. How many iPhones must Apple sell to break even?