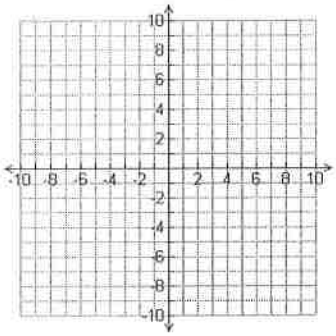
Linear Systems 100% Quiz Name _____

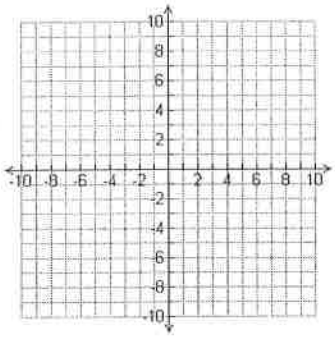
Solve by Graphing:

$y = 3x + 1$
$y = 2x + 3$



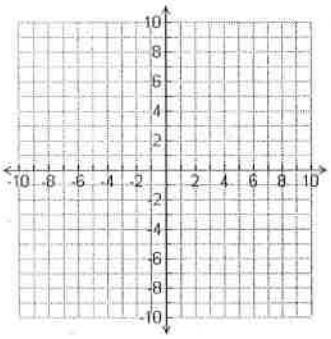
Solve by Graphing:

$y = -x + 1$
$y = 2x + 4$



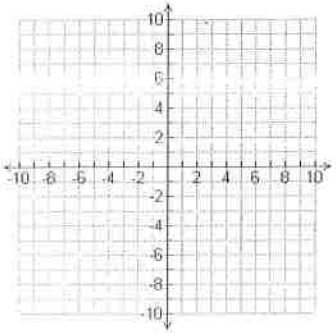
Solve by Graphing:

$y = -x + 5$
$y = -2x + 3$



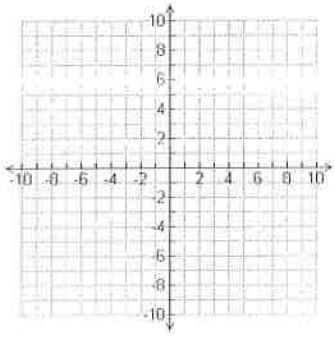
Solve by Graphing:

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



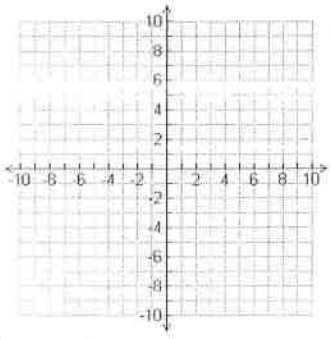
Solve by Graphing:

$5x = 2y - 8$
$3x + 2y = -8$



Solve by Graphing:

$3x - 2y = 6$
$3x - y - 4 = 0$



How many solutions does this system have: $y = \frac{2}{3}x - 5$ $2x - 3y = 6$	How many solutions does this system have: $5x - 2y = 4$ $4y = 10x - 8$	How many solutions does this system have: $2x - y = 7$ $4x + 3y = -9$
Find the value of k if the following are parallel: $2x - y = 7$ $kx - 2y = 8$	Find the value of k if the following system has infinite solutions: $kx - 3y = 4$ $y = \frac{1}{2}x - \frac{4}{3}$	Find the value of x if the following system is inconsistent: $kx + 5y = 10$ $5x - 2y - 6 = 0$
Solve the following by elimination: $x - y = 11$ $2x + y = 19$	Solve the following by elimination: $7x + 2y = 24$ $8x + 2y = 30$	Solve the following by elimination: $4x + 8y = 20$ $-4x + 2y = -30$

Solve the following by elimination: $9y = 4x + 9$ $x - 3y = -6$	Solve the following by elimination: $2x - 3y = 4$ $4x = 8 + 6y$	Solve the following by elimination: $x - 2y = 3$ $4y - 2x = 8$
Solve the following by substitution: $y = 6x - 11$ $2x + 3y = 7$	Solve the following by substitution: $2x - 3y = -1$ $y = x - 1$	Solve the following by substitution: $7x + 2y = 13$ $x - 2y = 11$

Find the value of two numbers if their sum is 12 and their difference is 4.	Flying to Kampala with a tailwind a plane averaged 158 km/h. On the return trip the plane only averaged 112 km/h while flying back into the same wind. Find the speed of the wind and the speed of the plane in still air.	Brenda's school is selling tickets to a spring musical. On the first day of ticket sales the school sold 3 senior citizen tickets and 9 child tickets for a total of $75. The school took in $67 on the second day by selling 8 senior citizen tickets and 5 child tickets. What is the price each of one senior citizen ticket and one child ticket?