

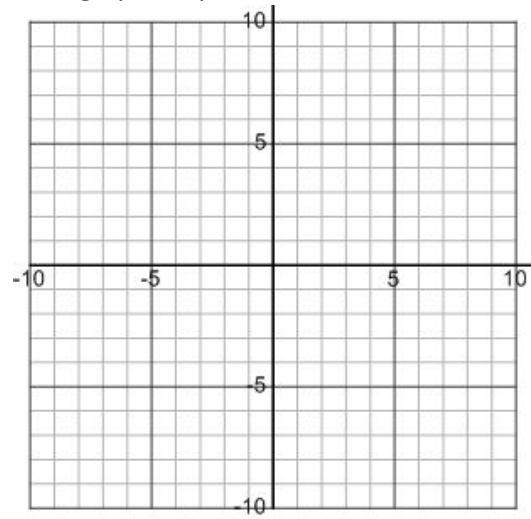
1. Solve the system of equations using substitution:

$$y = x - 7$$

$$4x + 5y = 10$$

How many solutions are there?

2. Now, graph the system of equations from #1 to solve graphically:



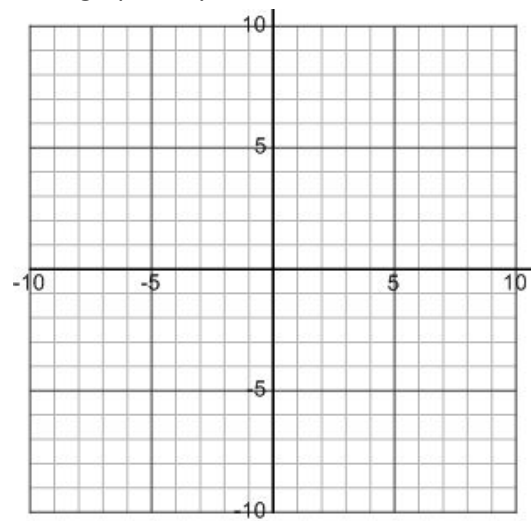
3. Solve the system of equations using substitution:

$$6x + 3y = 9$$

$$y - 3 = -2x$$

How many solutions are there?

4. Now, graph the system of equations from #3 to solve graphically:



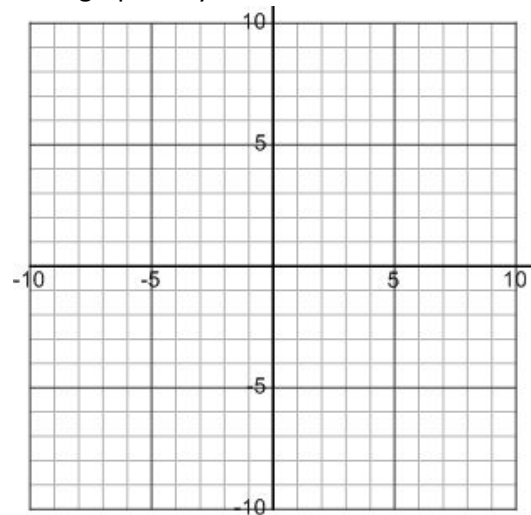
5. Solve the following system of equations using substitution.

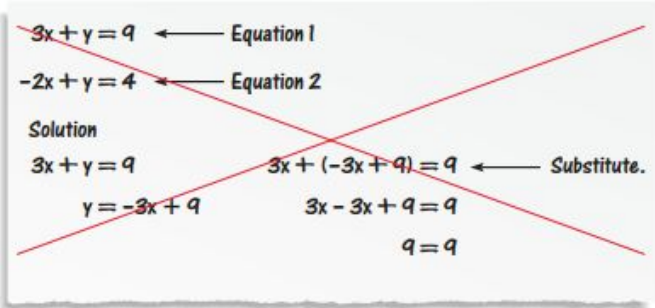
$$x - 5y = 0$$

$$-3x + 15y = -60$$

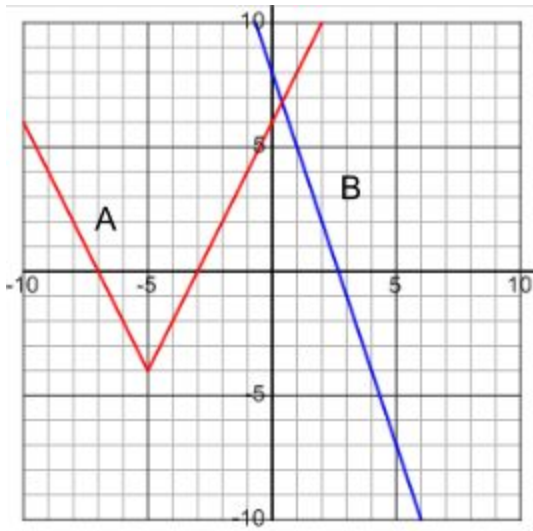
How many solutions are there?

6. Now, graph the system of equations from #5 to solve graphically.



<p>7. Solve the system of equations using substitution:</p> $2x + y = 3$ $x - 4 = y + 2$	<p>8. Solve the system of equations using substitution:</p> $3x - 2 = -y$ $-6x + 2 = 2y - 2$
<p>9. A system of two linear equations includes equations that have the same slope, but different y-intercepts. How many solutions does this system have?</p> <ol style="list-style-type: none"> No Solution One Solution Infinite Solutions None of the Above 	<p>10. If a system of two linear equations has an infinite number of solutions, then what must be true about the two equations?</p> <ol style="list-style-type: none"> The equations are the same line The equations ONLY have the same slope (nothing else is in common) There is nothing in common between the two equations. None of the Above
<p>11. Find and correct the student's mistake. Describe what they did wrong and find the correct solution.</p> 	
<p>12. Solve the equation for x:</p> $wx + y = z$	

13. Write the equations for both functions.



Equation A:

Equation B:

14. Sally has \$20 to buy \$4 pens or \$5 binders. This is the equation that represent this situation:

$$4x + 5y = 20$$

What is the x-intercept?

x-int: (,)

What does it mean in the situation?

What is the y-intercept?

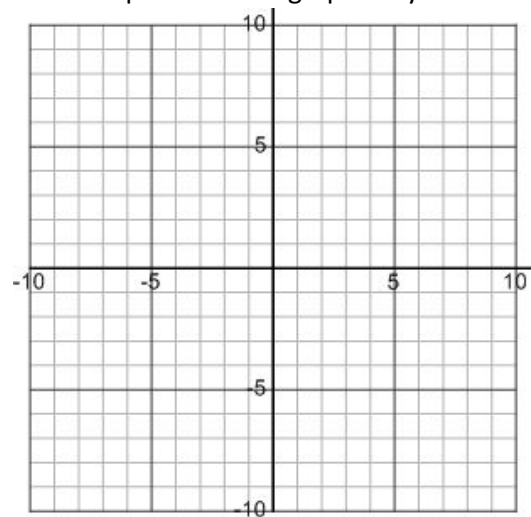
y-int: (,)

What does it mean in the situation?

15. Solve for x algebraically:

$$2|x - 3| - 5 = 1$$

16. Solve problem #15 graphically:



17. The graph of $f(x)$ is below. Graph the function $f(x) - 6$ on the same graph.

