

Solve the following systems using substitution.

11. $y = 2x$
 $y = x + 5$

The solution to the system is the point $(5, 10)$.

$$\begin{array}{r} 2x = x + 5 \\ -x \quad -x \\ \hline \boxed{x = 5} \end{array}$$

$$y = 2(5) = 10$$

$$\boxed{y = 10}$$

12. $x + y = 5$
 $y = x - 4$

The solution to the system is the point $(4.5, 0.5)$.

$$y = 4.5 - 4$$

$$\boxed{y = 0.5}$$

$$x + (x - 4) = 5$$

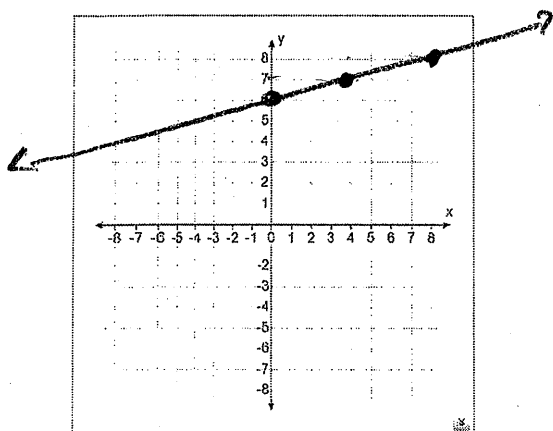
$$2x - 4 = 5$$

$$+4 \quad +4$$

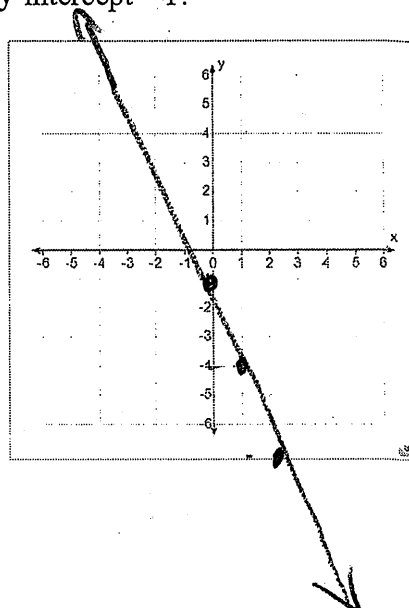
$$2x = 9$$

$$\boxed{x = 4.5}$$

13. Graph the line with the slope $\frac{1}{4}$ and y-intercept 6.

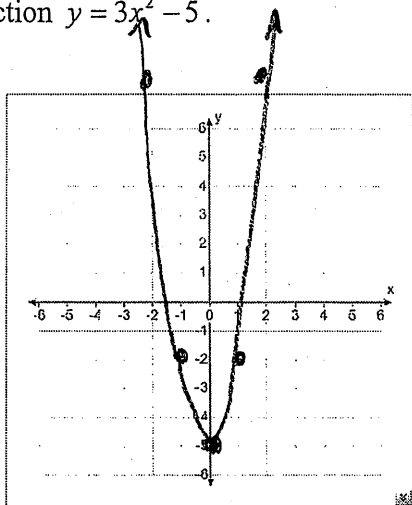


14. Graph the line with the slope -3 and y-intercept -1 .



15. Complete the table, then graph the function $y = 3x^2 - 5$.

x	y
-2	7
-1	-2
0	-5
1	-2
2	7



16. Write the equation $2x + 3y = 9$ in slope-intercept form and graph.

