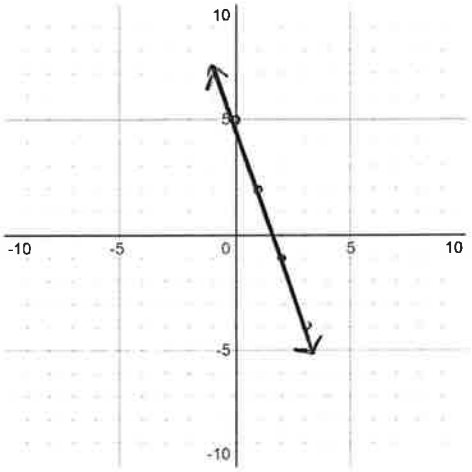
Name: KEY

Graphing and Equation Form Practice

Graph the following equations

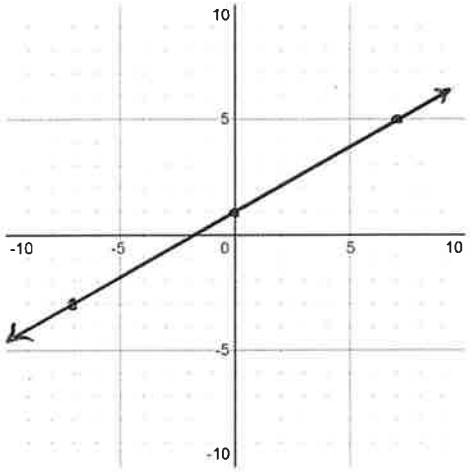
1. $y = -3x + 5$ ← y-int

slope $\frac{\text{Rise}}{\text{Run}}$



2. $y = \frac{4}{7}x + 1$ ← y-int

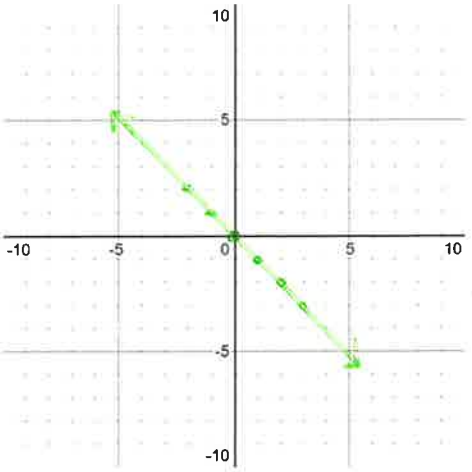
slope $\frac{\text{Rise}}{\text{Run}}$



3. $y = -x$

slope

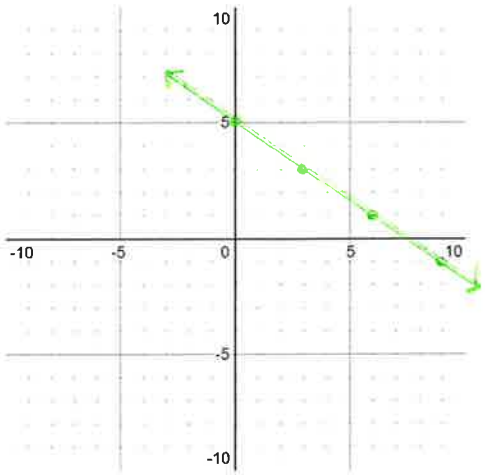
y-int is 0



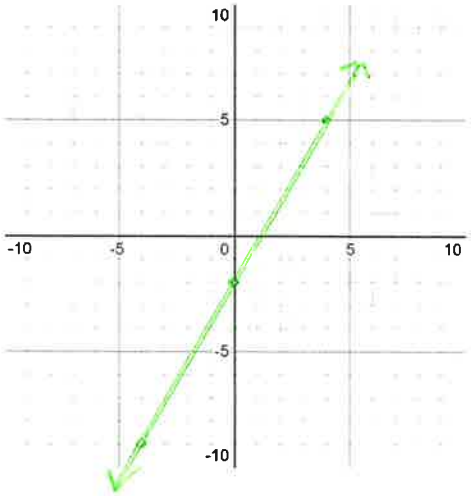
4. $y = 5 - \frac{2}{3}x$ ← y-int

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

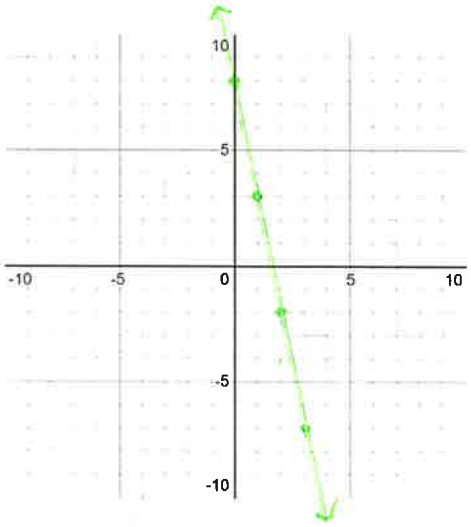
slope



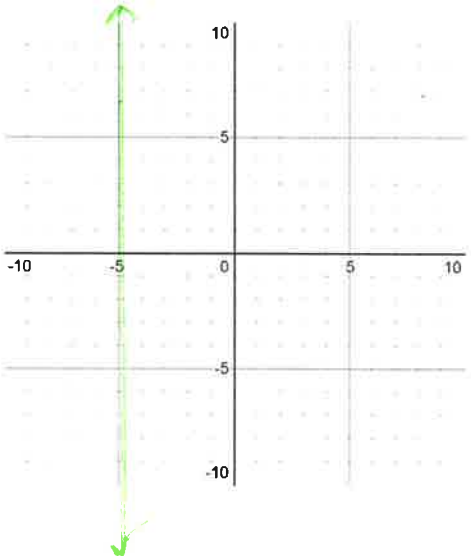
5. $y = \frac{7}{4}x - 2$



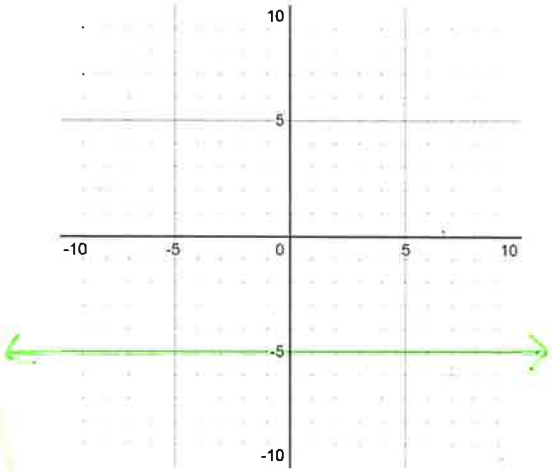
6. $y = -5x + 8$



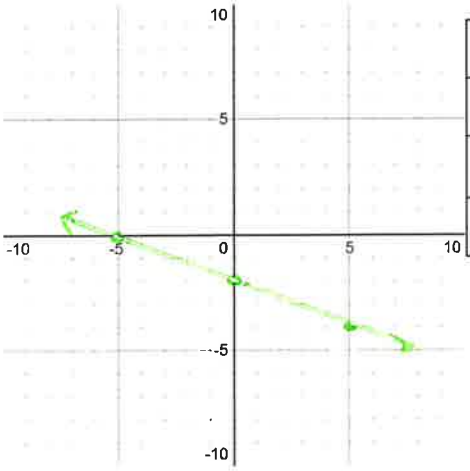
7. $x = -5$



8. $y = -5$



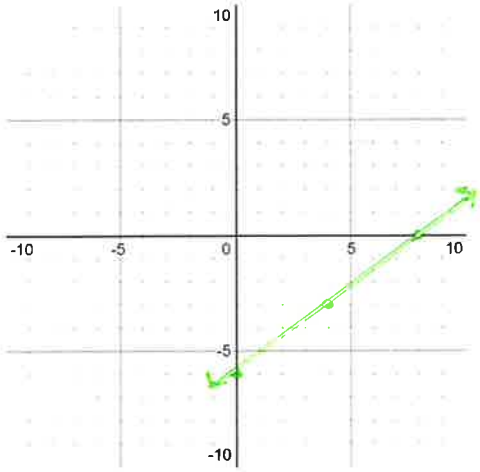
9. $2x + 5y = -10$



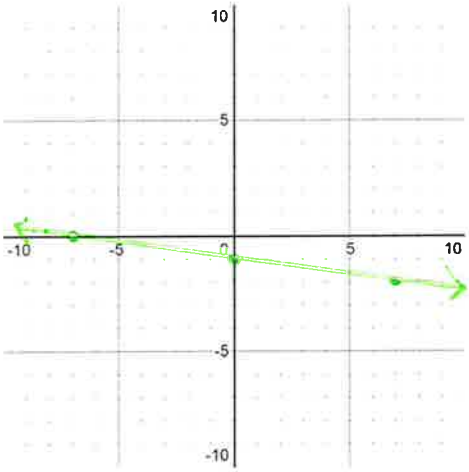
x	y
0	-2
-5	0
5	-4

10. $-3x + 4y = -24$

x	y
0	-6
8	0
4	-3



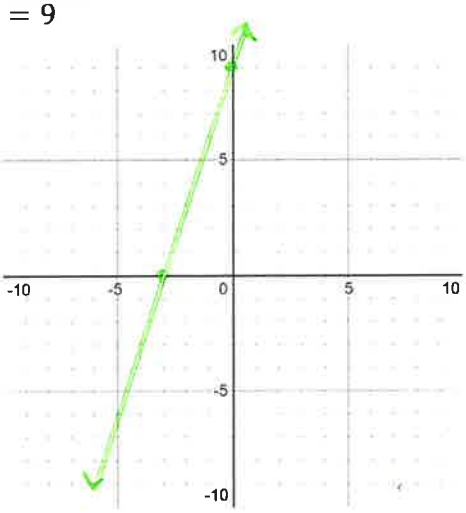
11. $x + 7y = -7$



x	y
-7	0
0	-1
7	-2

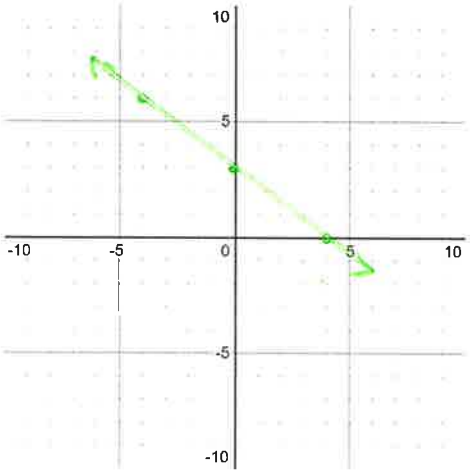
12. $-3x + y = 9$

x	y
0	9
-3	0



13. $-\frac{x}{4}-\frac{y}{3}=-1$

x	y
0	3
4	0
-4	6



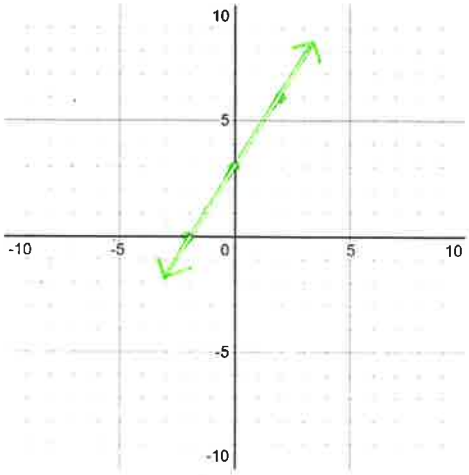
multiply by LCD

$\left(-\frac{x}{4}-\frac{y}{3}=-1\right)^{\times 12}$

$-3x-4y=-12$

14. $\frac{x}{2}-\frac{y}{3}=-1$

x	y
0	3
-2	0
2	6

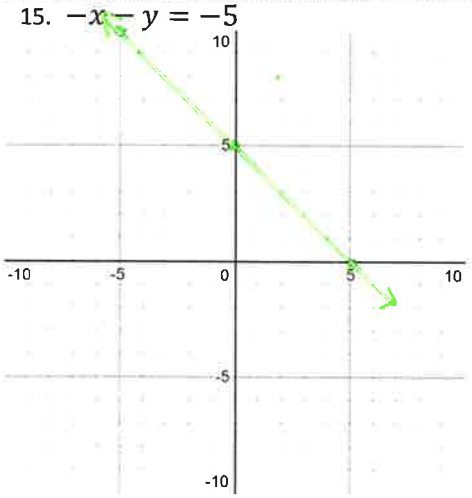


$\left(\frac{x}{2}-\frac{y}{3}=-1\right)^{\times 6}$

$3x-2y=-6$

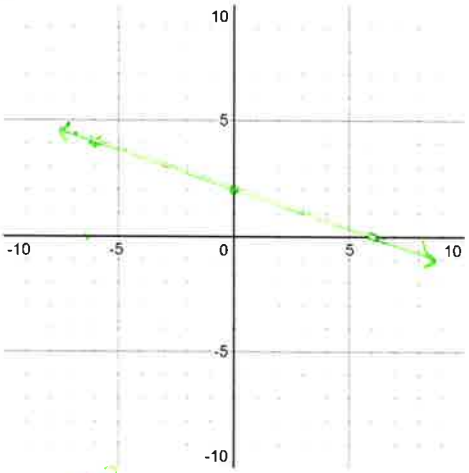
15. $-x-y=-5$

x	y
0	5
5	0
-5	10



16. $\frac{x}{3}+y=2$

x	y
0	2
6	0
-6	4



$\left(\frac{x}{3}+y=2\right)^{\times 3}$

$x+3y=6$

Need $y = mx + b$

Convert the following from Standard Form to Slope-Intercept Form

17. $-3x + 4y = 8$

$+3x \quad +3x$

$\frac{4y}{4} = \frac{3x}{4} + \frac{8}{4} \rightarrow y = \frac{3}{4}x + 2$

18. $7x - 3y = 21$

$-7x \quad -7x$

$\frac{-3y}{-3} = \frac{-7x}{-3} + \frac{21}{-3} \rightarrow y = \frac{7}{3}x - 7$

19. $-6x - 5y = -2$

$+6x \quad +6x$

$\frac{-5y}{-5} = \frac{6x}{-5} - \frac{2}{-5} \rightarrow y = -\frac{6}{5}x + \frac{2}{5}$

20. $4x + 9y = -12$

$-4x \quad -4x$

$\frac{9y}{9} = \frac{-4x}{9} - \frac{12}{9}$

$y = -\frac{4}{9}x - \frac{12}{9}$

$y = -\frac{4}{9}x - \frac{4}{3}$

EXTRA WORK SPACE