

**GRADE 11 ESSENTIAL  
UNIT F – GRAPH LINES – SLOPE INTERCEPT**

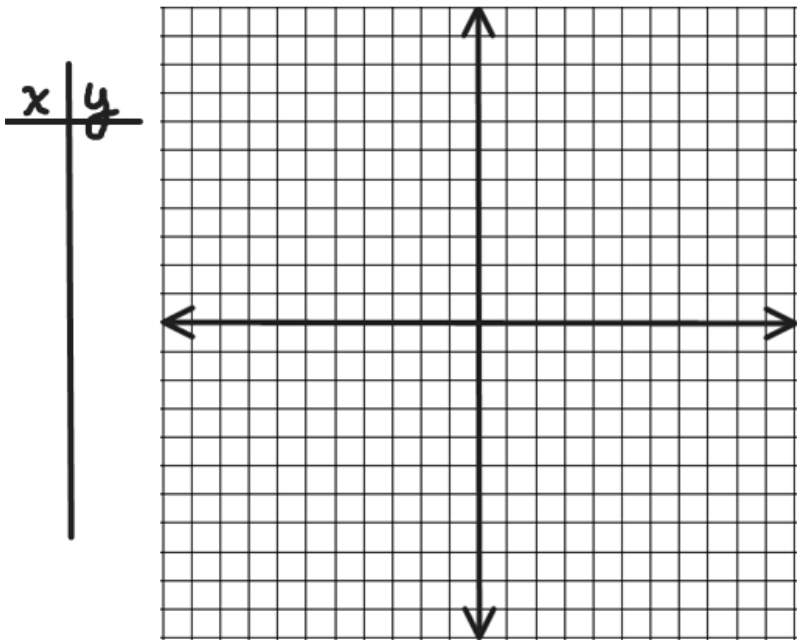
Try these  
without making  
a t-table!

Name: \_\_\_\_\_

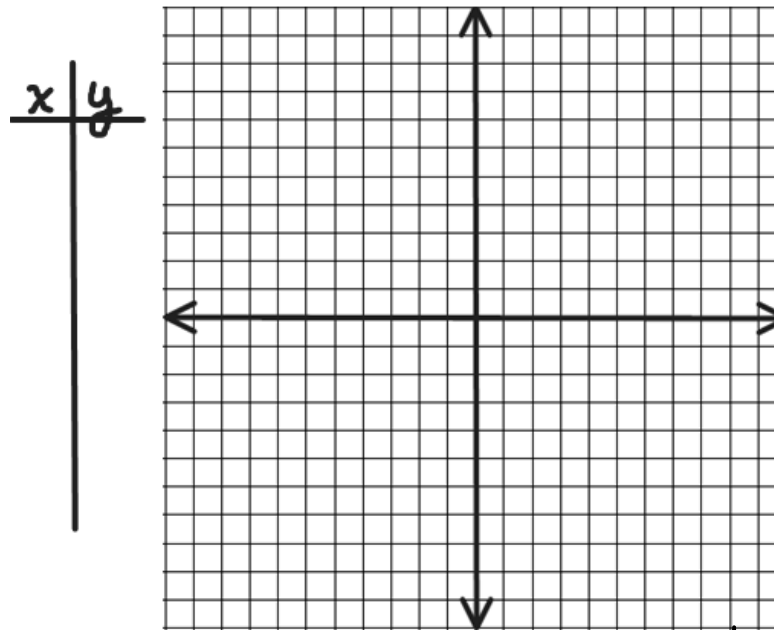
Date: \_\_\_\_\_

Graph the lines for the linear equations that are given in slope and intercept form. Use the t-table *if necessary*. Check with a graphing tool on your phone if you want.

1. Graph the line  $y = 3x$



2. Graph the line  $y = 12 - 6x$

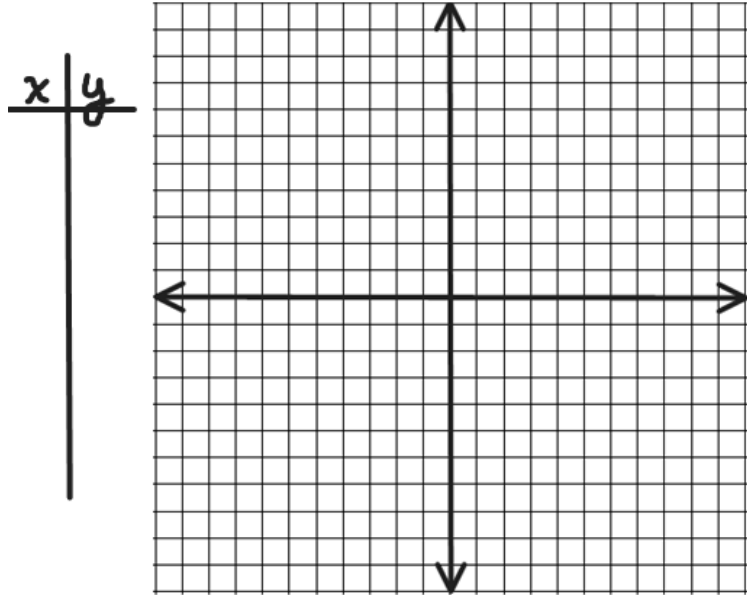


If the grid is not  
big enough you may  
have to scale it  
count by 2s or 5s

MrF

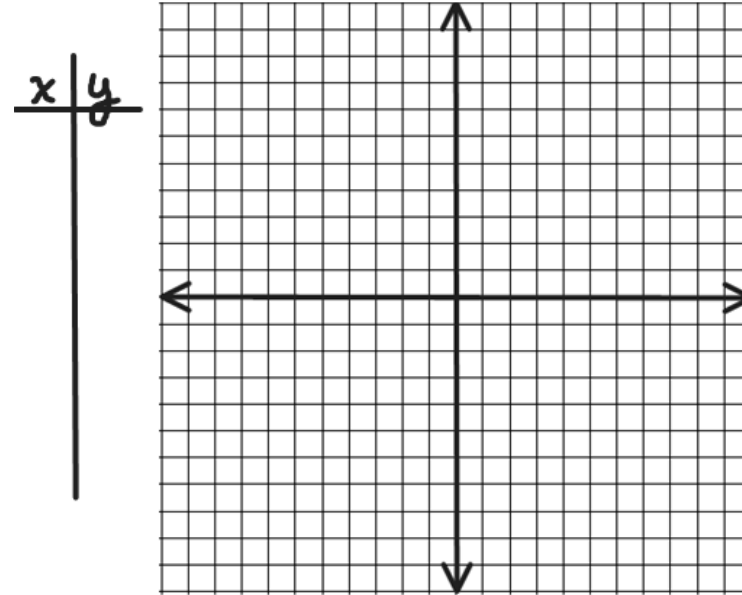
3. Graph the line  $y = 32$

Horizontal

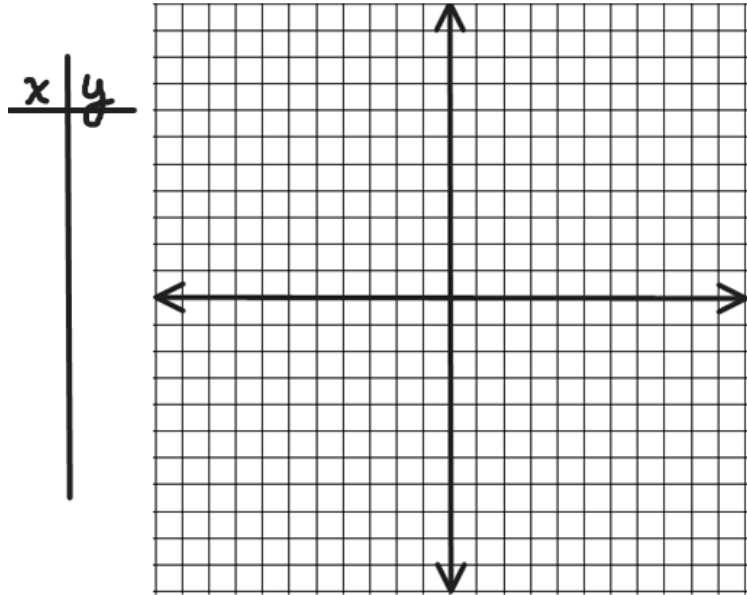


4. Graph the line  $x = 0$

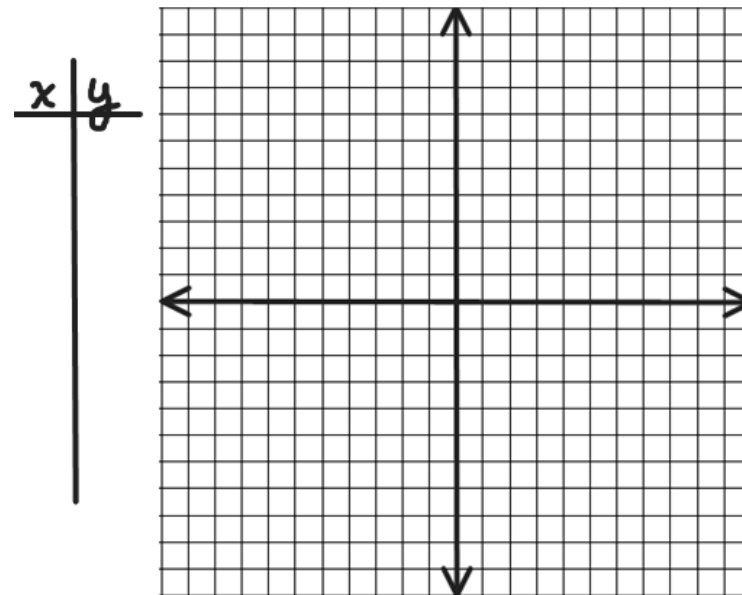
Vertical



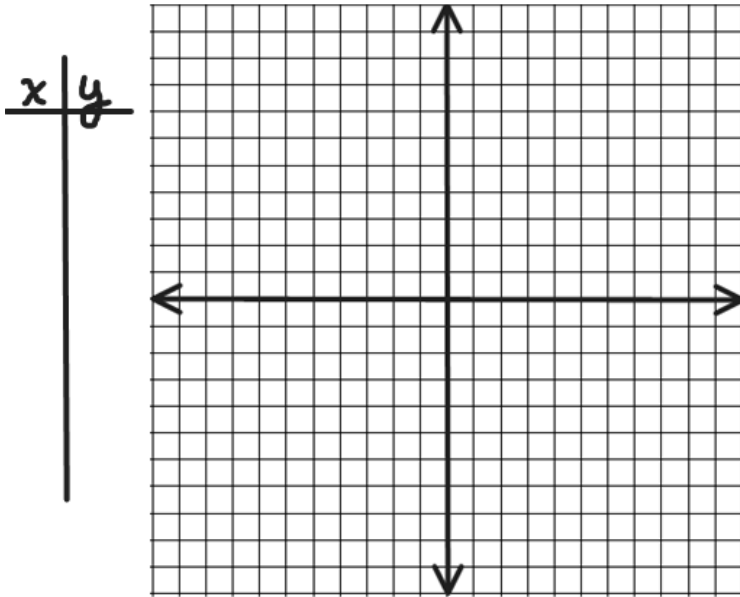
5. Graph the line  $y = \frac{1}{4}x - 15$  [ie:  $\frac{x}{4} - 15$ ]



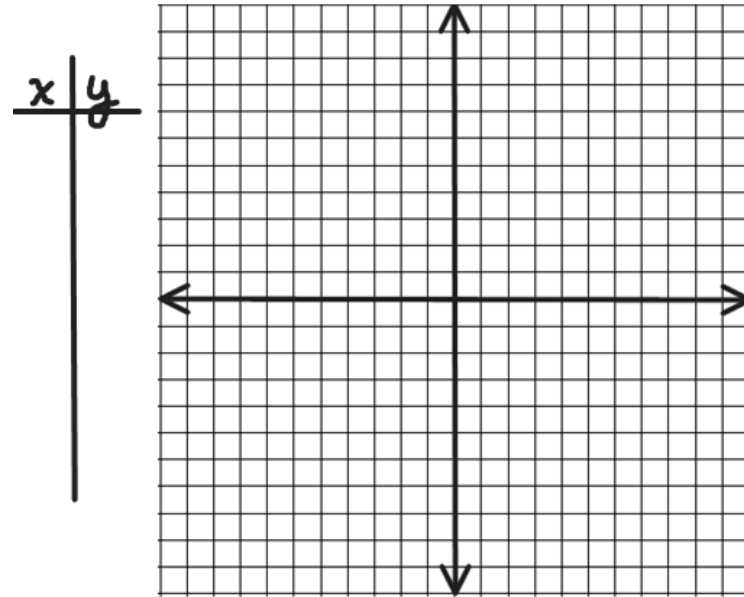
6. Graph the line  $y = \frac{3}{5}x - 5$  [ie:  $y = 0.6x - 5$ ]



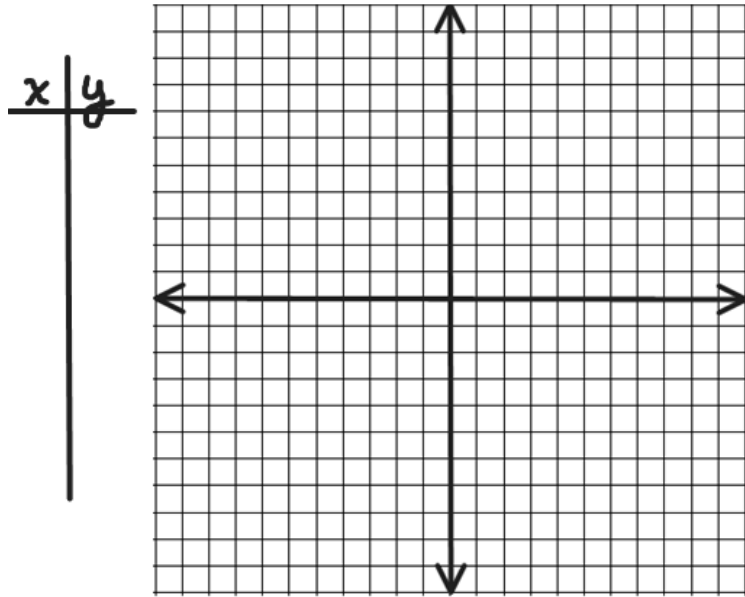
7. Graph the lines  $x = 5$  and  $y = 7$



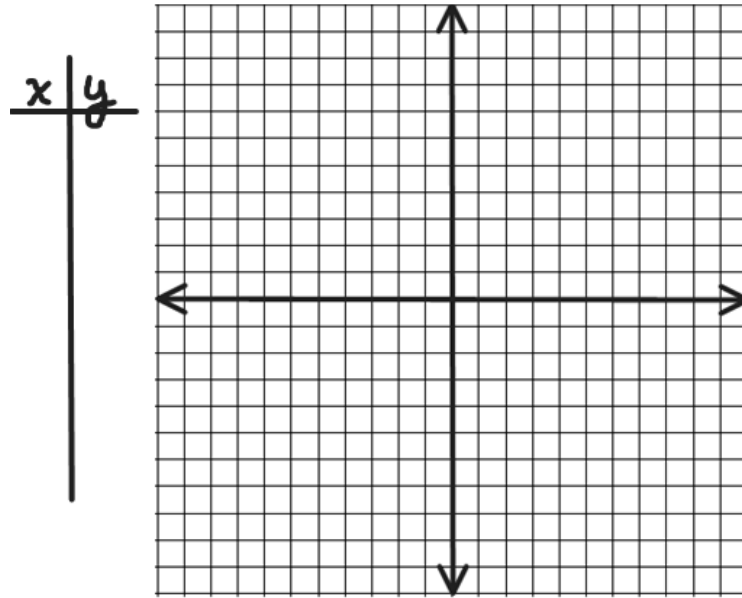
8. Graph the lines  $x = -3$  and  $y = 4$



9. Graph the line  $y = -6$  and  $y = 0.3x + 5$



10. Graph the lines  $y = 6 - \frac{2}{3}x$  and  $y = 4$



11. The form  $y = mx + b$  is a **standard form** for a line. The 'm' will be a value that is the slope of the line. The **b** will be a value where the **x** is zero and the line crosses the **y**-axis.

So for example  $y = 2x + 6$ ; the line crosses at the **y**-intercept point (0, 6) and rises a slope of 2 up for every step of 1 to the right.  $\frac{\Delta y}{\Delta x} = \frac{2}{1} = 2$

12. Of course your phone or laptop or tablet does all these too! (and more)

Try using the graphing tool at [Desmos.com](https://www.desmos.com) in your browser

Or try using the DESMOS App available on apple and Android

Or try using any of several graphing tools on line

Or try using a spreadsheet on your phone, or tablet, or laptop

Or try using your favourite app that you download

