


**Basic 2D Graphing**

Creating a graph in LiveMath is a three step process:

- 1) define  $y$  via an equation
- 2) highlight the equation

3) click on the 2D Graph button  in the palette



Let's make a graph of the line  $3x + 8$ .

First define  $y$  as  $3x + 8$  via the equation:

$$y = 3x + 8$$



$$y = 3x + 8$$



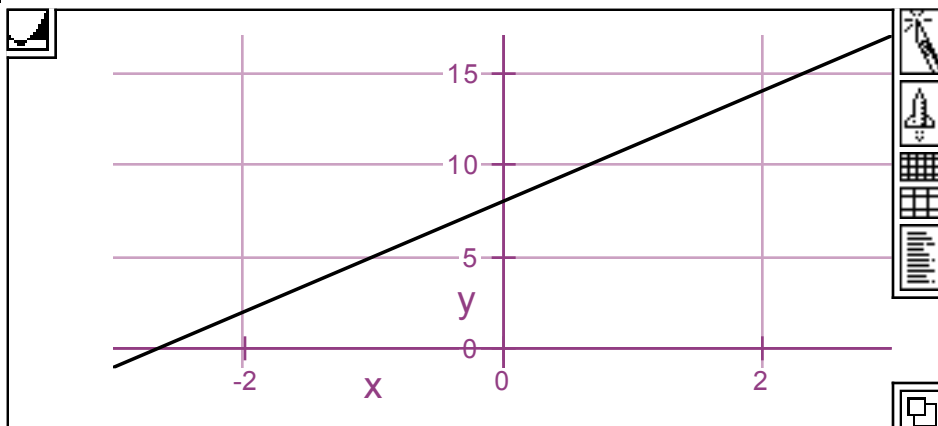
Click on the equal sign in this equation to highlight the whole equation. Alternatively, click the (left) mouse button and drag your cursor over the equation to highlight it.

Do not highlight the statement (including the icon). Just highlight the equation.

Once the equation is highlighted click on the 2D Graph button  in the palette.




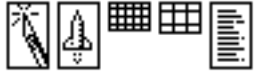
$$y = 3x + 8$$





LiveMath will create a Graphic Object. The horizontal axis is labeled  $x$  and the vertical axis is labeled  $y$  to reflect the variables used in the equation. The graph of the line is black and there are also several purple grid lines and axes.

The Graphic Object has its own icon  which is actually separate from the Graphic Object's window up in the top left corner. There are also several other icons



separate from the graphing window aligned vertically along the right hand side of the Graphic Object.

Finally there is a standard resizing  box in the bottom right hand corner.



**Now It's Your Turn...** Follow the directions below to get hands on experience.



Edit the definition of  $y$  above to the following and watch LiveMath redraw the graphic window with the graph of the new definition.

- 1)  $y = -3x + 8$
- 2)  $y = x^2$
- 3)  $y = 3$
- 4)  $y = \sin(x)$