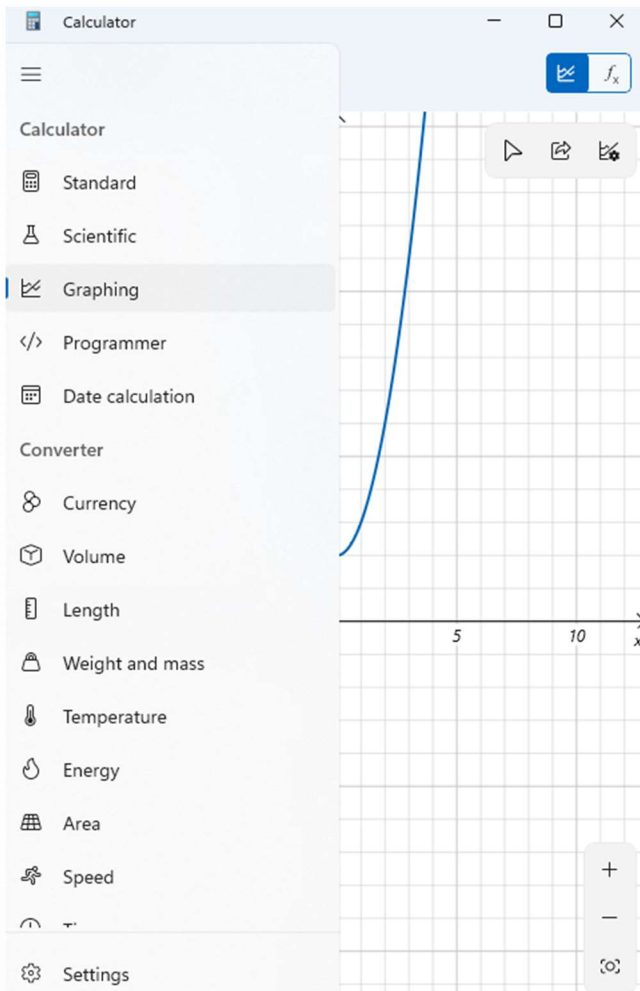
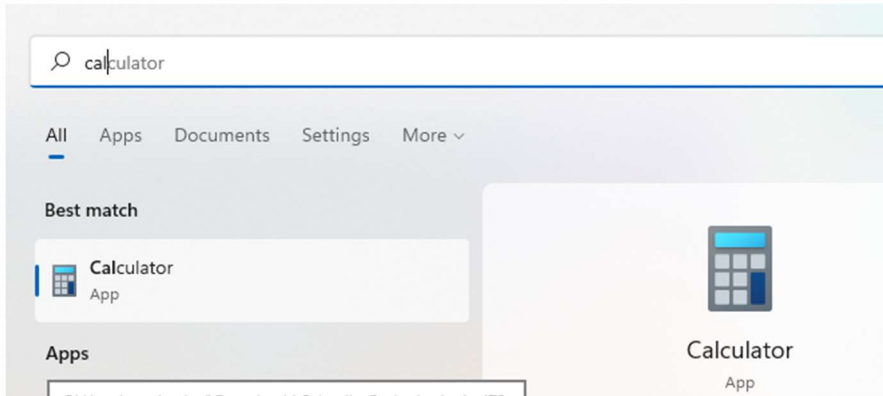
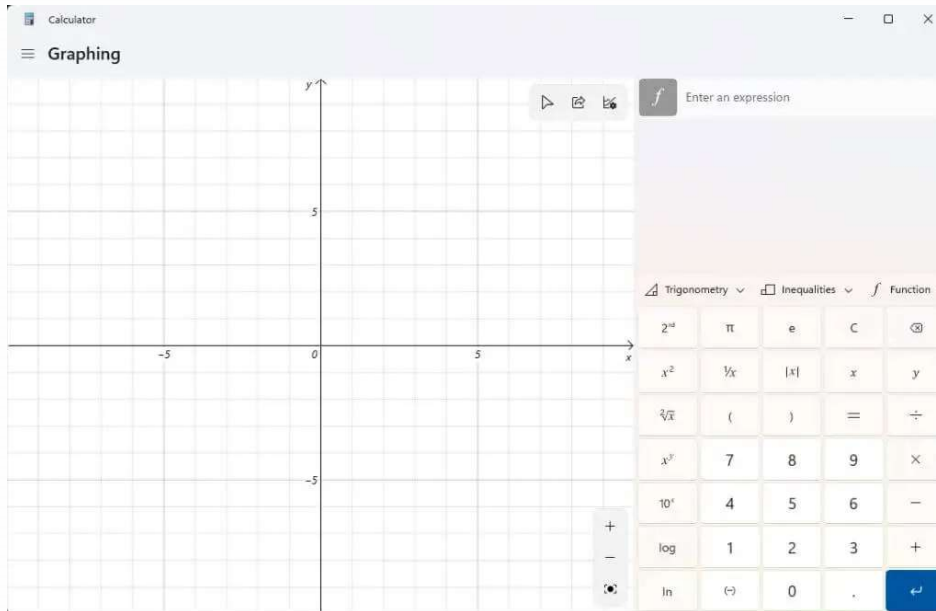


To open the graphing calculator, click the Start menu and type “calculator” in the search field. Then, select the **Calculator** app.



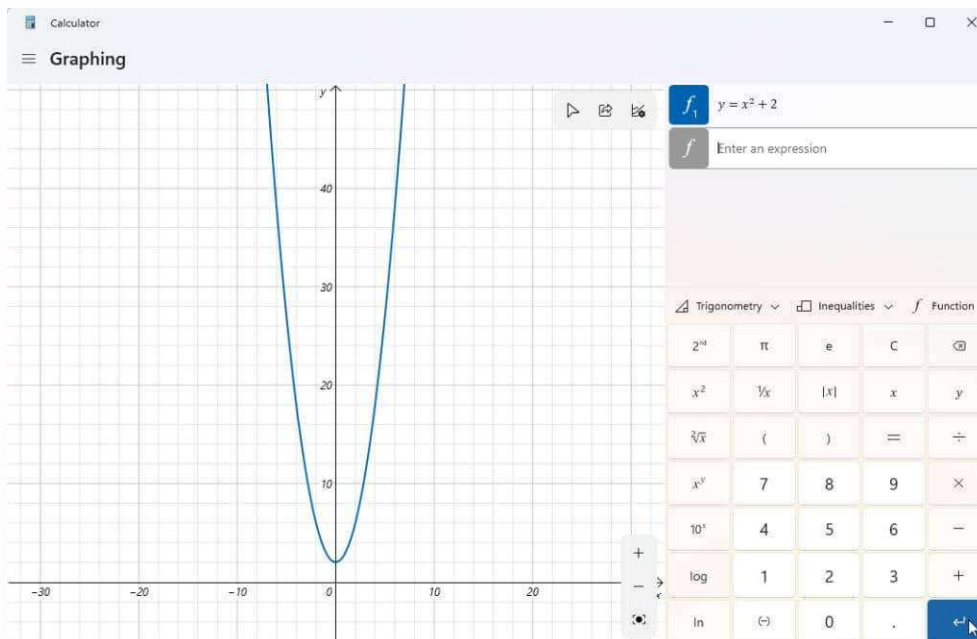
To access the graphing calculator, select **Graphing** from the menu. The graphing calculator will open in the same small window. So, you'll only see the graph unless you switch the display from calculator graphing mode to equation mode using the small toggle button at the upper right.

A better way to use the graphing calculator is to resize the window until both the graphing area and the equation editor appear side by side in the same window.

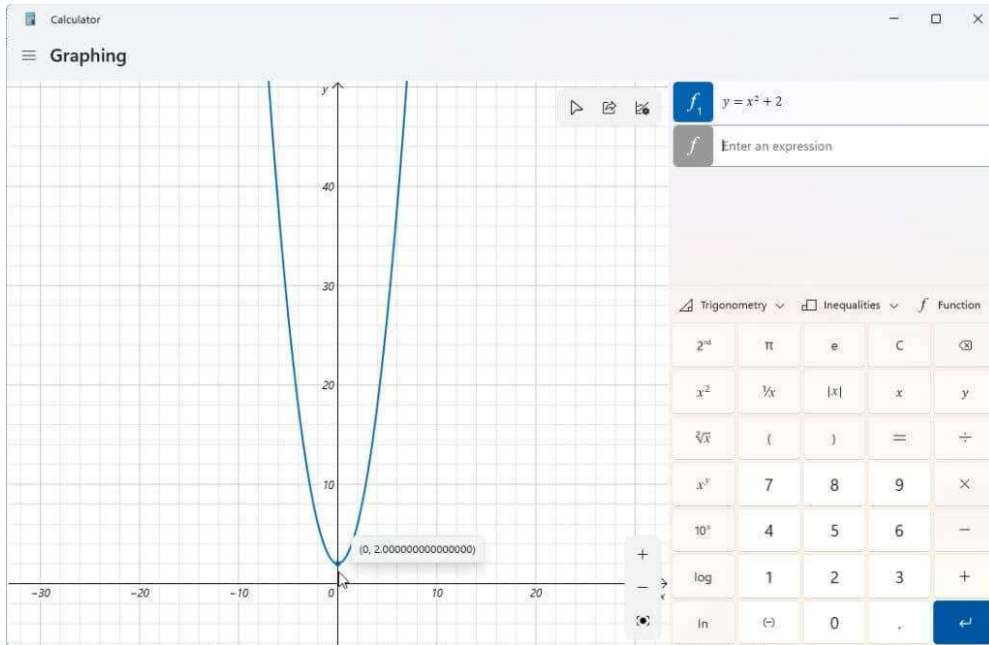


To demonstrate how the graphing calculator works, we'll start with a simple quadratic equation: $y = x^2 + 2$.

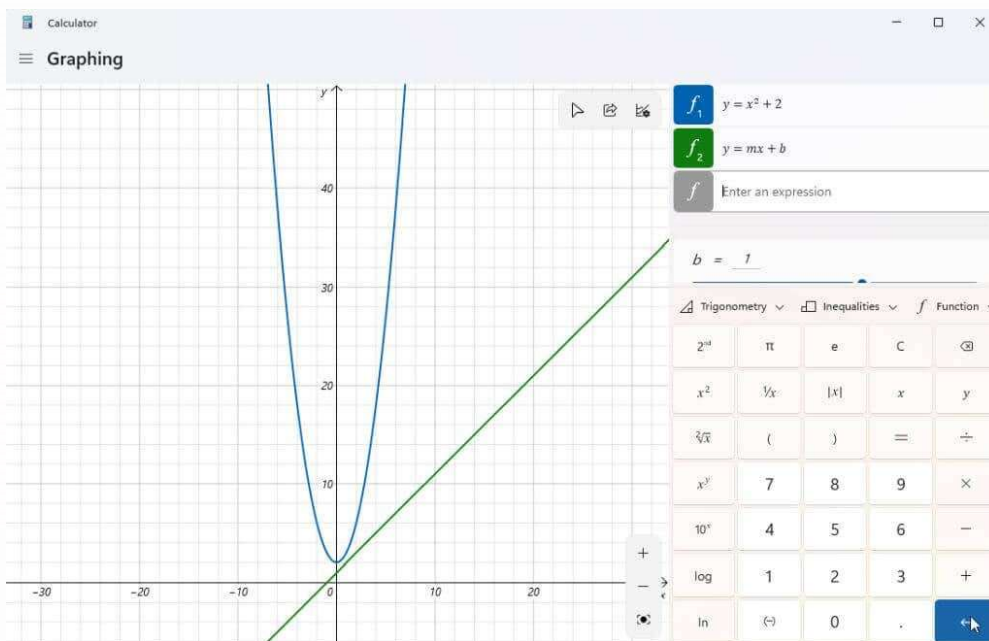
Type this formula into the **Enter an expression** field, and select the blue **Enter** button. You will see the graph appear in the left pane over the x- and y-axis.



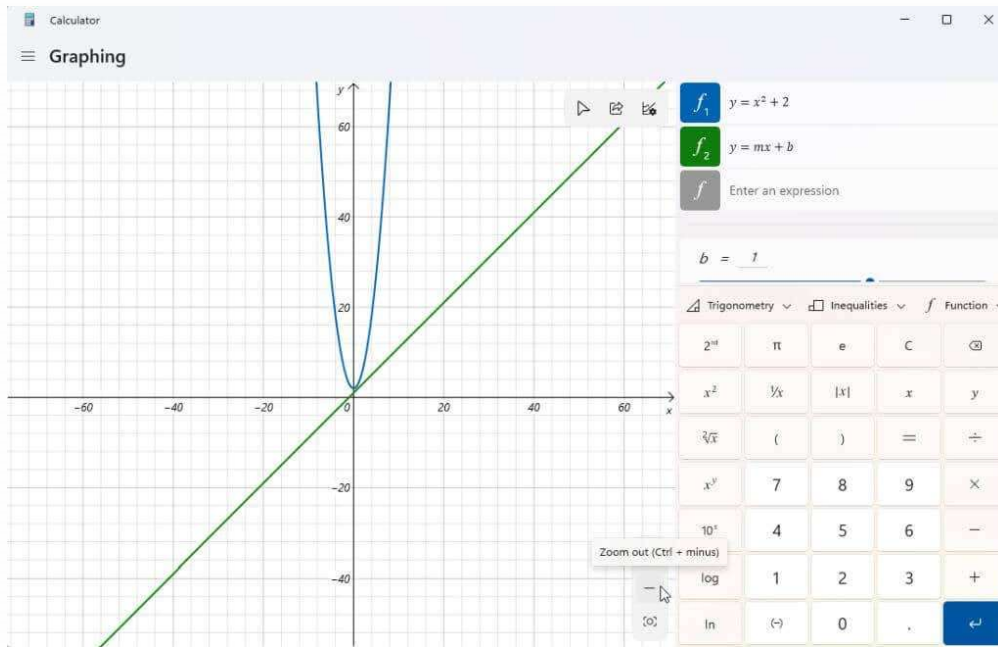
Now, the whole point of a graphing calculator is so that you can solve for values of y when given different values for x . Then, you can trace the graph with your cursor to see these values, such as the y -intercept (when $x = 0$).



You can also use the graphing calculator to manipulate variables in your expressions and see how those changes affect the graph. These are important when students are learning algebra and how different elements of a function affect the output results.

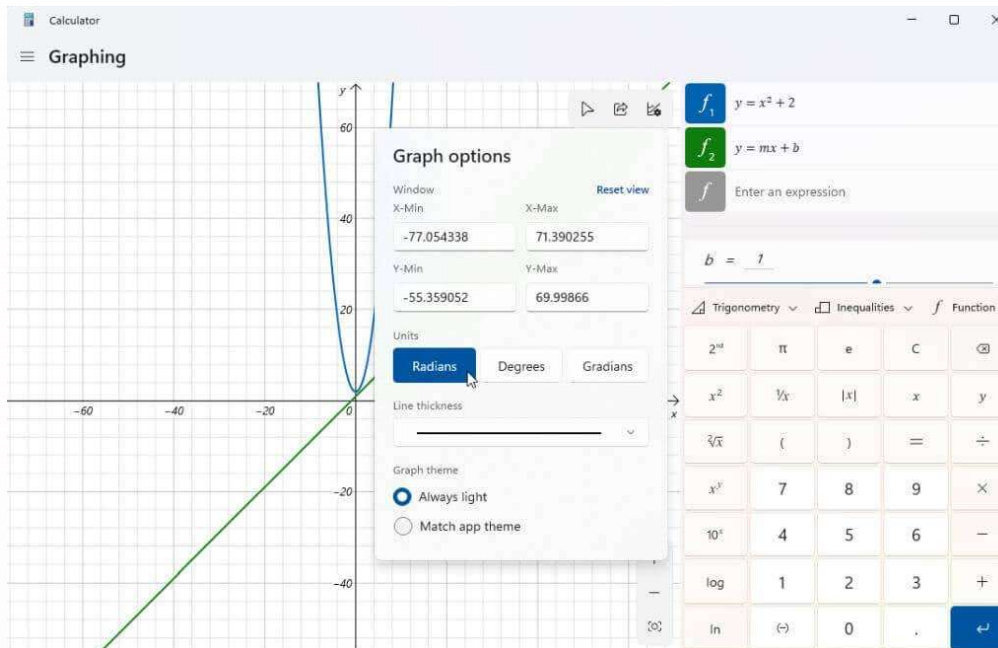


You may notice that your graph isn't centered in the display, or you can't see it well. You can use the + and - buttons at the lower right corner of the chart to zoom in and out. You can also left-click and drag the mouse anywhere in the graph area to slide the display in any direction.



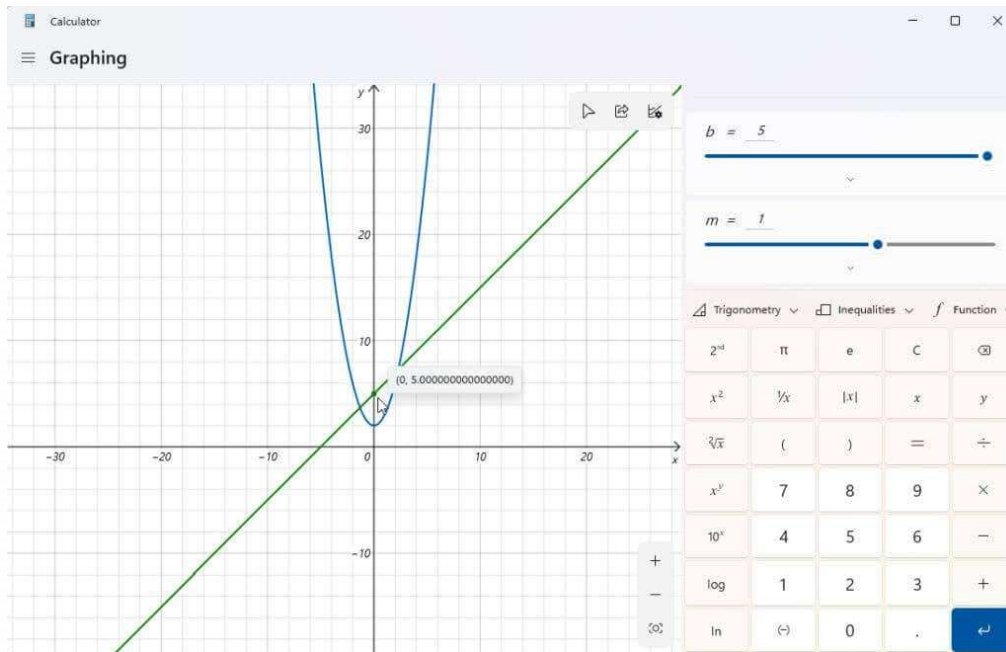
If you select the Graph options icon at the upper right corner of the chart, you'll also have the option to adjust the min and max values for x and y. This is another way to adjust the display area of the chart.

You can also adjust units between Radians, Degrees, and Gradians.

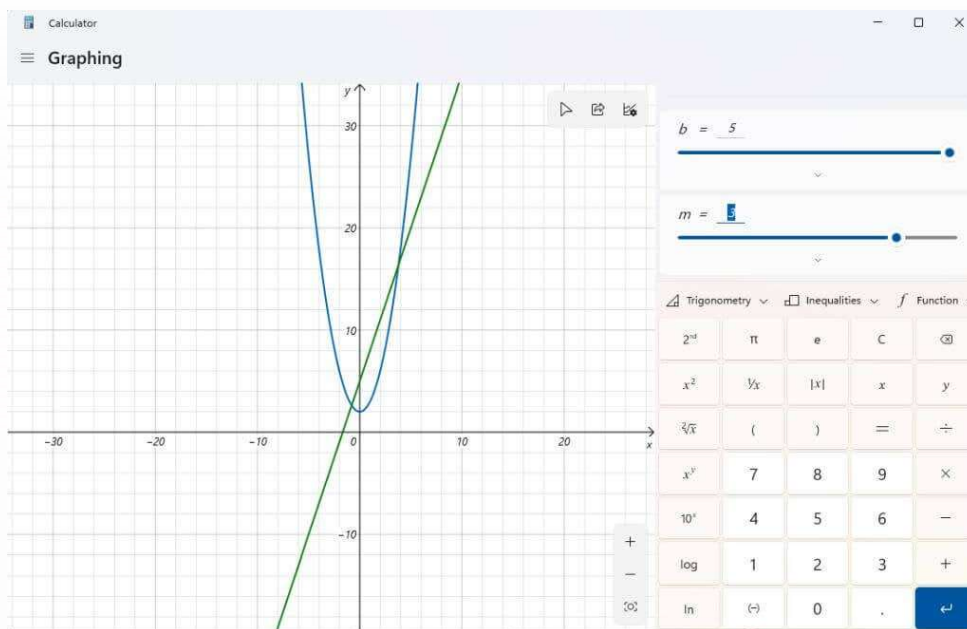


Once your graph is centered, try manipulating variables to see how it affects the output. The [linear function](#) above has two variables, m , and b . If you scroll down using the scroll bar to the right of your expressions, you'll see a section showing these expression variables. The graphing calculator has made assumptions about what value these variables are to chart it.

Try adjusting the b variable in the linear function; you'll notice that the line shifts up the y -axis by the value you've entered.



Try adjusting the m variable as well. You'll see that when you do this with a linear equation, it will increase or decrease the slope of the line.



You can see more details about each expression you've entered by selecting the **Analyze function** icon to the right of the expression.

