

How to Do Page 179 #27 Using *GeoGebra*

Use *GeoGebra* to create sliders for a , b , and c to investigate how each variable affects the graph of a quadratic function.

- Click on the slider icon . Then, click on the screen where you want to place the slider.
 - Enter the name and minimum and maximum values you wish for the variable. See Figure 1.

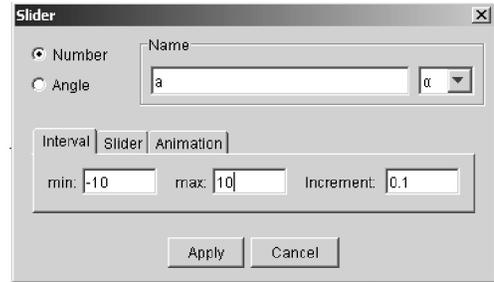


Figure 1

- Create a slider for the remaining two variables.

See Figure 2.

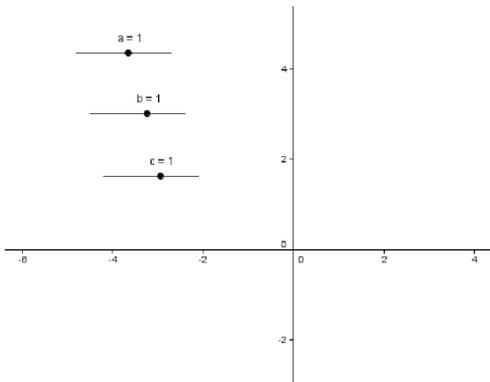


Figure 2

- Enter the equation to be graphed.
 - On the input line at the bottom of the screen enter $y=a*x^2+b*x+c$

See Figure 3.

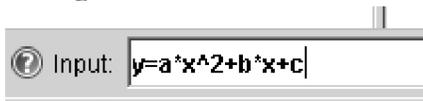


Figure 3



3. Click on the move icon  and observe the parabola as you move the sliders. See Figure 4.

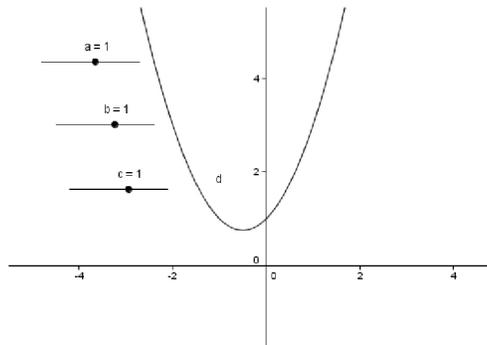


Figure 4

4. If you wish to animate a slider, right-click on the slider and click Animation On. If you wish to remove the label d for the parabola, double click on the parabola, choose Object Properties as shown in Figure 5. Then, turn off Show Label and click Close.

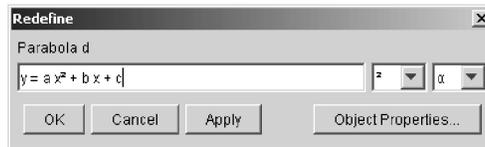


Figure 5

