

- Use the left and right arrow keys to cursor along the curve to any point to the left of the zero.

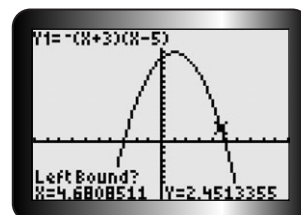
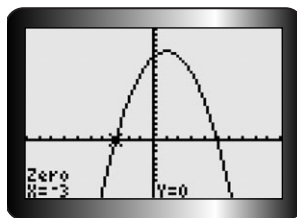
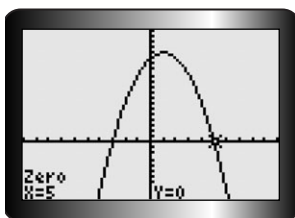
Press **ENTER** to set the left bound.

- Cursor along the curve to any point to the right of the zero.

Press **ENTER** to set the right bound.

- Press **ENTER** again to display the coordinates of the zero (the  $x$ -intercept).

- Repeat to find the second zero.



## B-9 Finding the Maximum or Minimum Values of a Function

The least or greatest value can be found using the **minimum** operation or the **maximum** operation.

- Enter  $y = -2x^2 - 12x + 30$ .

Graph it and adjust the window as shown. This graph opens downward, so it has a maximum.

- Use the **maximum** operation.

Press **2nd** **TRACE** **4**. For parabolas that open upward, press

**2nd** **TRACE** **3** to use the **minimum** operation.

- Use the left and right arrow keys to cursor along the curve to any point to the left of the maximum value.

Press **ENTER** to set the left bound.

- Cursor along the curve to any point right of the maximum value.

Press **ENTER** to set the right bound.

- Press **ENTER** again to display the coordinates of the optimal value.

