

Follow the steps below to find the  $x$ -intercepts of a quadratic function using the graphing calculator

Find the  $x$ -intercept(s) for  $y = x^2 - 5x + 3$ .

**Step 1:** Enter quadratic equation into calculator for  $[Y_1]$ .

**Step 2:** Enter 0 for  $[Y_2]$ .

**Step 3:** Using left arrow [ $\leftarrow$ ], move cursor to line descriptor on the left of  $[Y_2]$  and press  $[\text{ENTER}]$  to bold this line.

**Step 4:**  $[\text{GRAPH}]$  (Notice,  $y=0$  is a bold line on the  $y$ -axis.)

Recall: The  $x$ -intercept is where parabola intersects the  $x$ -axis or where  $y = 0$ .

**Step 5:** Since the  $x$ -intercept(s) (or zeros or roots) is where the graph intersects the  $x$ -axis, choose **5:intersect**  $[\text{ENTER}]$ .

**Step 6:** Move the cursor or blinking light to one of the  $x$ -intercepts.

**Step 7:** Press  $[\text{ENTER}]$   $[\text{ENTER}]$   $[\text{ENTER}]$ .

One of the  $x$ -intercepts is  $(0.7, 0)$ .

**Step 8:** Repeat **steps 5 to 7** to get second  $x$ -intercept.

