

## How to Do Page 174 #5a) Using TI-83/84

1. Enter the equation in the Y= screen.

- Press  $\boxed{Y=}$ .
- Press  $3 \boxed{x,T,\theta,n} \boxed{x^2} \boxed{+} 7 \boxed{x,T,\theta,n} \boxed{-} 6 \boxed{ENTER}$  as shown in Figure 1.



Figure 1

2. Enter a window and graph the function.

- Press  $\boxed{WINDOW}$  and enter the values. A possible window for this function is shown in Figure 2.
- Press  $\boxed{GRAPH}$ . You will see Figure 3.



Figure 2

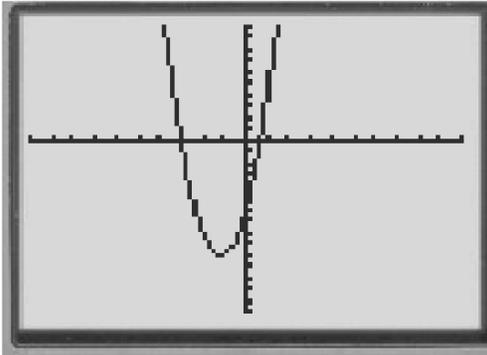


Figure 3



3. Find the  $y$ -intercept.
- Press **TRACE**.
  - To enter  $x = 0$ , press **0** **ENTER**. See Figure 4.
  - Find the minimum, press **2nd** **TRACE**.  
Choose 3: minimum. See Figure 5.

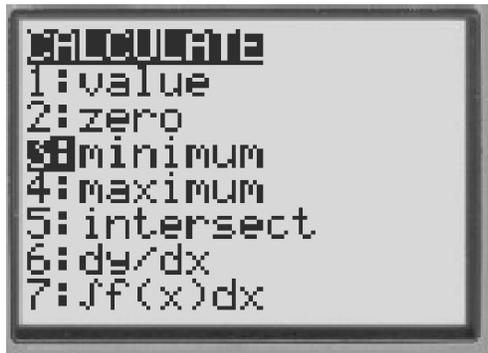


Figure 5

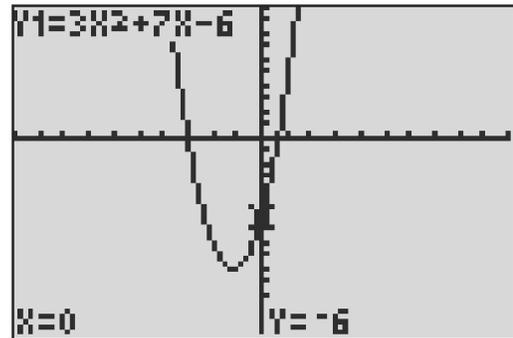


Figure 4

- To enter a left boundary, move the cursor anywhere to the left of the minimum and press **ENTER**.
- To enter a right boundary, move the cursor anywhere to the right of the minimum and press **ENTER**.
- To enter a guess, use the same value you used for the right boundary and press **ENTER**. The minimum will be displayed as in Figure 6.

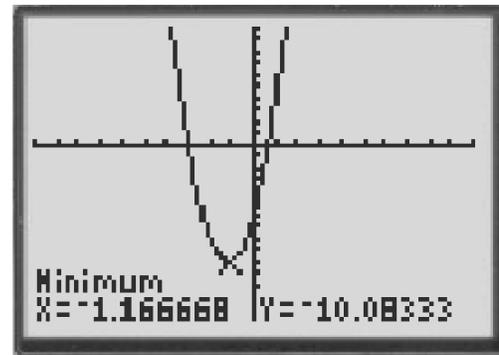


Figure 6

4. Find the  $x$ -intercepts.
- Press **2nd** **TRACE**.
  - Choose 2: zero **ENTER**. See Figure 7.
  - Since there are two  $x$ -intercepts, for the following steps it is best to choose your left and right boundary so that it is an interval containing only one  $x$ -intercept at a time.

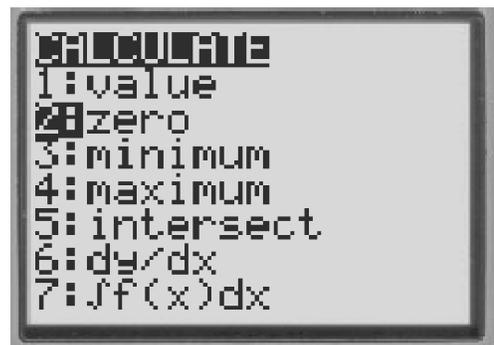


Figure 7



Name: \_\_\_\_\_

Date: \_\_\_\_\_

**TM 3-7**  
(continued)

- To enter a left boundary, move the cursor to the left of one of the  $x$ -intercepts and press **ENTER**.
- To enter a right boundary, move the cursor to the right of the same  $x$ -intercept and press **ENTER**.
- To enter a guess, use the same value you used for the right boundary and press **ENTER**.
- Repeat the process for the other  $x$ -intercept.  
You will see Figures 8 and 9.

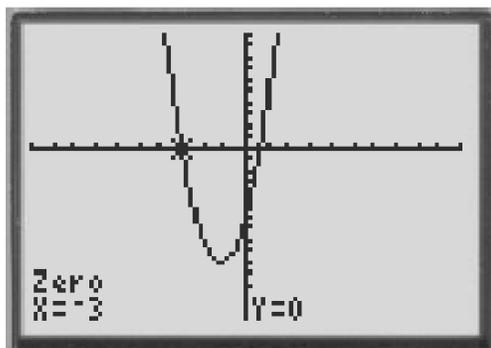


Figure 8

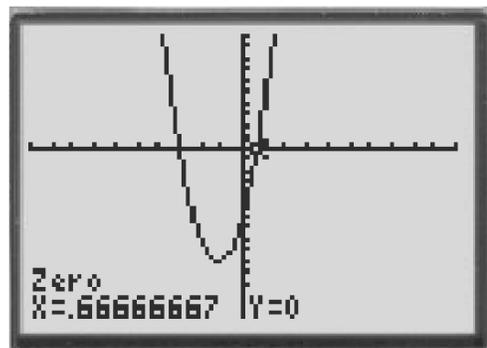


Figure 9

