

Graphing Quadratic Equations on TI84

Objectives:

- Graph quadratic function on the calculator in a complete window
- Locate the vertex, roots and max/min values of the function
- Analyze a situation given its quadratic equation.

1. Clear functions from $y1 =$ screen

2. Input function into $y1=$

3. 6 for standard window

Viewing area is from -10 to 10 on x axis and -10 to 10 on y -axis

If the complete graph is not on the screen, adjust the window.

button

Enter desired coordinates for the screen. This may take a few tries to get the complete window.

4. **Find the vertex:**

Use 2nd

Choose **max or min**

Move cursor to the **left** side of the vertex and

Mover cursor to the **right** side of the vertex

Guess

Record result

5. **Find the roots or zeros or solutions of the function.**

These are the x-intercepts.

Use 2nd (calc) function on graphing keys.

Select #2 zero from the menu.

Trace along to the **left** side of the root,

Trace along to the **right** side of the root, .

Hit on guess.

Calculator will approximate the x -intercept for you.

You must do this for each x -intercept.

If the parabola does not hit the x -axis, your roots are imaginary.