

Calculator Strategies for Solving

* Windows $[x_{min}, x_{max}]$ by $[y_{min}, y_{max}]$

Intercepts

Put equation (standard form) in y_1 . Looking where graph crosses x-axis. Fix window as needed, then hit 2ND TRACE 2 (ZERO). Move your cursor to left of the intercept, hit enter to lock it in. Go to the right of the intercept, lock it in with enter. Hit enter once more. The zero ($x =$) is $\pm$. Repeat if necessary.

(What you Need to Show) ① Graph (Sketch) ② window ③ Solution(s)

Intersections

Put left side of equation in y_1 , right side in y_2 . Graph. See where they intersect. Change window if needed.

HIT **2ND** **TRACE** **5** (Intersectw) **ENTER** **3X**

The x-value of the intersection is your solution. Repeat if needed

WHAT YOU NEED TO SHOW (2) Graph (sketch) (3) Window (4) Solutions

① $y_1 =$ $y_2 =$

Tables

Tables the equation

To solve using tables, key in your calculator. Hit 2ND GRAPH to access the table for the graph. Scroll + look for the place(s) where the sign changes in y_1 . The lower x becomes your new Table Start. Hit 2ND WINDOW + key in your table start. Set $\Delta Tbl = .1$ for first time. Then access the table again. Look for the sign change in y_1 . Take the lower x where the sign change occurred as your new Table Start. Make $\Delta Tbl = .01$. Repeat twice more.

WHAT YOU NEED TO SHOW: ① Soln, rounded to 1000th's.

(2) Table (2 rows)

Final	x	y
	x	y