

Find roots of quadratic equation using TI 83 plus:

First, check if your calculator has it

- Apps (blue button near the green one)
- A menu will appear, if your calculator has this function, it will be in "PlySmlt 2".
- If your calculator doesn't have the program you can get it through calculator to calculator transfer (using the small black wire that comes with your calculator) - this method is used if one of the calculators has the program.

Connecting Two Calculators with a Unit-to-Unit Cable

The TI-83 Plus link port is located at the center of the bottom edge of the calculator.

1. Firmly insert either end of the unit-to-unit cable into the port.
2. Insert the other end of the cable into the other calculator's port.

On the sending unit press **2nd** **[LINK]**

Go down the menu and choose option "C: Apps..." and press ENTER

On the next screen, choose the option "PlySmlt 2" and press ENTER

Press **[▶]** on the sending unit to display the **TRANSMIT** menu.

On the new receiving unit, press **2nd** **[LINK]** **[▶]** to display the **RECEIVE** menu.

Press **[ENTER]** on the receiving unit.

Press **[ENTER]** on the sending unit. A copy of the selected item(s) is sent to the receiving unit.

Wait until the **DONE** screen appears on both calculators.

Using the "PlySmlt 2" to find root of quadratic equation:

Equation: $-x^2 + 11.2x = 0$

Press **[APPS]** to display a list of applications on your calculator.

Select PolySmlt. The information screen is displayed.

Press any key to continue. The MAIN MENU is displayed.

Select Poly Root Finder.

Enter the degree of the polynomial (2), and then press **[ENTER]**.

Enter the coefficients of the polynomial $\{-1, 11.2, 0\}$. Press **[ENTER]** after each coefficient to move the cursor to the next line.

```
a2x^2+a1x+a0=0
a2=-1
a1=11.2
a0=0
MAIN|DEGR|CLR|LOAD|SOLVE
```

Select SOLVE (press **[GRAPH]**) to calculate and display the roots.

```
a2x^2+a1x+a0=0
x1=11.2
x2=0
MAIN|COEF|STOa|STOx|STOy
```