Graphing **LINEAR EQUATIONS** using the TI-83:

- Equations must be solved for $y$.
- Use “Y=” button, enter equation (hit “ENTER”), hit “graph” button

A) Graph: \[ y = \frac{2}{3}x - 4 \]

B) Graph: \[ 5x - 2y = 6 \]

Graphing a **SYSTEM OF LINEAR EQUATIONS** using the TI-83

- Graph each equation separately, so …
- Equations must be solved for $y$.
- Use “Y=” button, enter equation (hit “ENTER”), hit “graph” button
- Find point of intersection by going to “CALC”, then (5) intersect, then “ENTER” 3 times

A) Solve the following system:
   \[
   \begin{align*}
   3x + y &= 4 \\
   x - 2y &= 6
   \end{align*}
   \]

B) Solve the following system:
   \[
   \begin{align*}
   3y - 9x &= -6 \\
   4y + 8x &= 12
   \end{align*}
   \]
Graphing **QUADRATIC EQUATIONS** using the TI-83

- Equations must be solved for $y$.
- Use “Y=” button, enter equation (hit “ENTER”), hit “graph” button
- View table of values by going to “TABLE” (scroll up & down to find other values in table.)

A) Graph: $y = 3x^2 - 12x + 13$.

B) Graph: $y = -3x^2 + 6x + 5$.

Graphing a **SYSTEM OF QUADRATIC/LINEAR EQUATIONS** using the TI-83

- Graph each equation separately, so …
- Equations must be solved for $y$.
- Use “Y=” button, enter equation (hit “ENTER”), hit “graph” button
- Find point of intersection by going to “CALC”, then (5) intersect, then “ENTER” 3 times, then find 2nd point of intersection by repeating the process, but use your arrow keys to move cursor close to the other point of intersection, then “ENTER” 3 times.

A) Solve the following system:

\[ y = x^2 + 4x + 3 \]
\[ y + x = -1 \]

B) Solve the following system:

\[ y = x^2 - 6x + 8 \]
\[ 2y + x = 4 \]