

Graphing the Tangent line on the TI-83/84

Consider the problem of finding the equation of the tangent line of the function $f(x)=x^2+2x$ at $x=2$.

- 1) Graph the function as Y1.
- 2) Press **GRAPH**
- 3) Press **2nd PRGM** which is the DRAW menu.
- 4) Select **#5 Tangent(**
- 5) Now you should be looking at the graph and the calculator wants you to input a point. Enter **2** (for $x=2$) and press **ENTER**.

The tangent line at that point should appear and the equation given on the bottom of the screen.

