(1) Plug the given function into $Y_1$. Sketch the graph of the whole function (i.e. make sure that you can see the “important” parts of the function in your calculator viewing window, and then sketch the graph below). Label all extrema as a relative minimum or a relative maximum (or absolute minimum/maximum, as the problem requires), and approximate their corresponding $x$-values.

(2) Find the derivative of the given function, and plug it into $Y_2$.

(3) Use solver to find the points where the derivative equals 0. (Use the above $x$-value approximations as your “guesses” so the calculator knows where you want it to search.) Additionally, write down any $x$-values where the derivative does not exist (the only times this will happen: when the function does not exist, when there is a vertical tangent line, where the graph makes a sharp point).

(4) Plug the values found in part (3) back into the original function.

(5) Label and write out all relative extrema appropriately (this is why we labeled them ahead of time in step 1). If the problem asks for the absolute minimum, select the point(s) found in the previous steps with the smallest $y$-value. If the problem asks for the absolute maximum, select the point(s) found in the previous steps with the largest $y$-value.