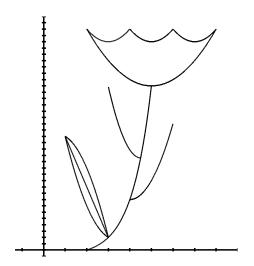
Graphing with Piecewise Functions

Make a picture using the piecewise functions we discussed in class. At the very least, you must include the curves mentioned here. Additional curves are fine too. Though not required, I would be extra impressed if you included rational functions.



- (a) At least one line or line segment
- (b) At least two parabolic segments one of which has its vertex not at the origin.
- (c) At least one function that is a shifted transformation of a previous function.
- (d) At least one exponential function segment.
- (e) At least one logarithm function segment.
- (f) At least one polynomial with degree greater than 2.



To receive extra credit (maximum 5 test points), your picture must attempt to represent something recognizable by your instructor or his minions. If a description will help clarify the picture you may want to include that. A random combination of curves that makes a nice design but is not related to some animate object will not receive full extra credit.

I suggest you use the free program, $\underline{\text{WinPlot}}$, to draw/print your picture. You can print directly from WinPlot and neatly hand-write your equations or print twice, once with equations showing. Other options: Copy and paste into a Word Processor and type in your equations. Take a screen shot showing Picture & Inventory. Be sure to designate the curves which satisfy (a) - (f) if it is not obvious.