For both of these problems you must:

- Find the intervals on which $f$ is increasing/decreasing.
- Find the intervals on which $f$ is concave up/down.
- Locate all min/max/inflection points.
- Graph $f$ so that all the above is clearly visible.

WARNING: If you use a calculator to generate a graph, you must “show your work” by sketching a copy. Also, you must label it so that I can tell what function is being graphed.

1. $f(x) = \frac{2x}{x^2 + 8}$

2. $f(x) = \frac{e^{x/2}}{x}$