## $\label{eq:Quiz #8, 10/24} \text{Math 156 (Calculus I), Fall 2023}$

Problem 1 is worth 10 points, for a total of 10 points. Remember to  $show\ your\ work$  on all problems!

1. Consider the function  $f(x) = x^4 - 2x^2 + 1$  with domain the closed interval  $-2 \le x \le 2$ . Find the absolute minimum and absolute maximum values of f on this domain, and also state the points where these extreme values occur.