Math 1700    Extra Problems for Section 5.4

Find all relative maxima, relative minima, and points of inflection for the following functions. Then sketch the functions.

1) \( f(x) = xe^{-x^2/2} \)
2) \( h(x) = \frac{\ln(x)}{x} \)
3) \( g(t) = \frac{e^t + e^{-t}}{2} \)
4) \( f(w) = e^{-w^2/2} \)