For the following functions: a) find increasing/decreasing intervals, b) find relative extrema. Use the graph of the function to confirm your answers.

1. \( f(x) = x^2 - 4x \)

2. \( f(x) = x^3 - 3x^2 + 5 \)
3. \( f(x) = \frac{x}{x^2-1} \)