

1. Consider the following function $g(x) = \frac{3 - 2x}{x^2}$

(a) Analyze g (intercepts, domain, asymptotes, etc.)

(b) Analyze g' (increasing, decreasing, local extrema)

(c) Analyze g'' (concavity, inflection points)

(d) Put it all together and NEATLY sketch a well-labeled graph of $g(x)$

2. Find the absolute extrema of $f(x) = x^4 - 8x^2 + 16$ on the interval $[-1, 3]$.