## Problem 1

Sketch $f(x)=x^{5}-10 x^{4}$. Remember that this means: find $f^{\prime}$ and $f^{\prime \prime}$, critical points, intervals of increase/decrease, local min/max, intervals of concavity, and inflection points and give a sketch of a graph that has all of these properties.

## Problem 2

Give the intervals of increase/decrease, concavity, critical points and inflection points for the function $f(x)=$ $\frac{x^{2}-3}{x-2}$.

