Name: [1 pt]

Problem 1. Find the intervals of concavity and points of inflection for the function $f(x) = 5x^3 - 3x^5$.
[5 pts]

Problem 2. Find all the horizontal asymptotes of the curve $y = \dfrac{\sqrt{1 + 4x^6}}{2 - x^3}$. [5 pts]