

Find the intervals on which f is increasing or decreasing, any relative extrema, and the intervals of concavity and inflection points.

$$f(x) = x^3 - 12x + 1 \quad f(x) = \frac{x^2}{x^2 + 3}$$

Find all of the information that you need to graph the following functions and graph them.

$$f(x) = \frac{x^2 - 1}{x^3} \quad f(x) = x - 3x^{1/3}$$