

Curve Sketching WS

Find and label all the discontinuities, the zeros and the horizontal asymptotes for each function.

$$1) f(x) = \frac{3x^2 - 8x + 5}{x^3 - 1}$$

$$2) g(x) = \frac{\sqrt{16x^4 - 9}}{2x^2 - 5x - 7}$$

$$3) h(x) = \frac{4x^2 + 3x - 10}{e^x - 1}$$

$$4) \phi(x) = \frac{\sin(x) - 1}{x^2} \quad \text{on } [0, 2\pi]$$