

MATHEMATICS
Monday October 12 2015
Third Exercise Class

1) Study domain and sign of the following functions

$$y = 9x^3 - 4x$$

$$y = x^3 + 8x^2 + 5x - 2$$

$$y = \frac{3x+1}{4-x^2}$$

$$y = \frac{1}{x} - \frac{x}{x^2+x+1}$$

$$y = \frac{x-1}{x^2-11x+10}$$

$$y = \frac{x-2}{x^4+5x^3+5x^2-5x-6}$$

$$y = \frac{x^4-1}{x^3+x^2-10x+8}$$

$$y = \frac{\sqrt{4x^2-3}}{x+5}$$

$$y = \sqrt{\frac{x^2-4}{1-x^2}}$$

$$y = \sqrt{\frac{x^2+2x}{x-1}} - \frac{1}{\sqrt{x^2-1}}$$

$$y = \frac{\sqrt{x^2-3}}{x-5} + \sqrt{-x^2+x+30}$$

$$y = \frac{\sqrt{x+1}-1}{x^2+2x}$$