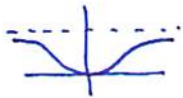


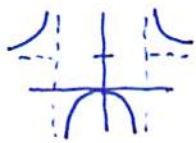
Tutorial 5: Curve Sketching Problems



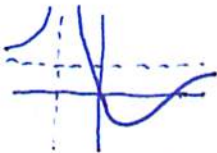
$$y = 9x^2 - x^4$$



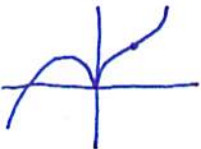
$$f(x) = \frac{x^2}{x^2 + 1}$$



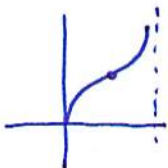
$$y = \frac{x^2}{x^2 - 1}$$



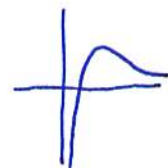
$$y = \frac{x^2 - x}{(x + 1)^2}$$



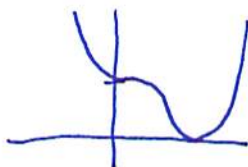
$$f(x) = x^{2/3} (x + 5)$$



$$y = \sqrt{\frac{x}{4 - x}}$$

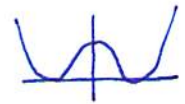


$$f(x) = \frac{8(\sqrt{x} - 1)}{x}$$

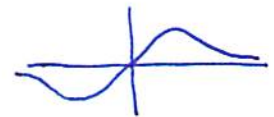


$$y = 3x^4 - 4x^3 + 1$$

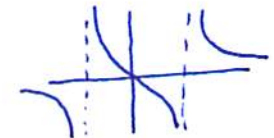
$$y = x^4 - 8x^2 + 16$$



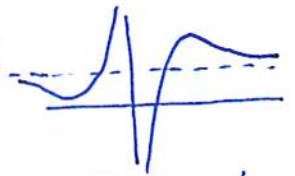
$$f(x) = \frac{x}{x^2 + 2}$$



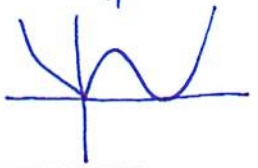
$$y = \frac{x}{x^2 - 1}$$



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



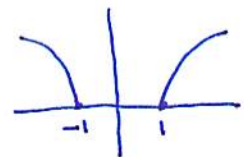
$$y = x^{2/3} (x - 3)^2$$



$$y = x\sqrt{3 - x}$$



$$f(x) = \sqrt{x^2 - 1}$$



$$y = \left(\frac{x-3}{x-1} \right)^2$$

