

Calculus 1 Assignment 8

Alex Cowan
cowan@math.columbia.edu

Due Wednesday, April 3rd at 5 pm

1. Find where the following functions are positive, negative, increasing, decreasing, concave up, and concave down, and then sketch them.

a) $2x^3 - 3x^2 - 6x + 7$

b) $e^{-x} \cos x$ for $x \geq 0$

c) $\frac{x^3}{x^2-4}$

2. Determine which polynomials are depicted below. I made the x -coordinates of the extrema and inflection points of the third polynomial “as simple as possible”.



