

NAME _____

1. Find the absolute maximum and absolute minimum values of f on $[1/2, 2]$

$$f(x) = x - \ln x$$

2. A cubic function is a polynomial of degree 3. Give examples (equation & sketch) of a cubic function with
- A. No local extrema
 - B. One local extrema
 - C. Two local extrema
 - D. Three local extrema
 - E. What is the minimum and maximum local extrema a cubic function can have?