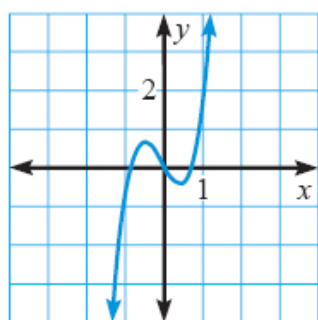


Name: \_\_\_\_\_

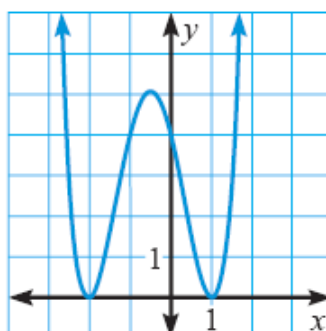
## Extrema on an Interval

- 1) Show that the function  $y = f(x) = \ln x - x^2 + x$  attains its maximum value of 0 when  $x=1$
- 2) Estimate the coordinates of each turning point and state whether each corresponds to a local maximum or a local minimum. Then list all the real zeros and determine the least degree that the function can have

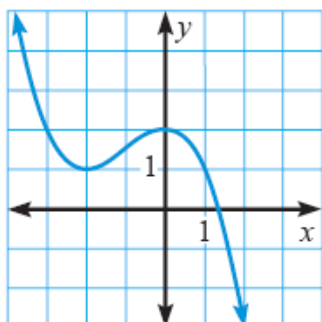
1)



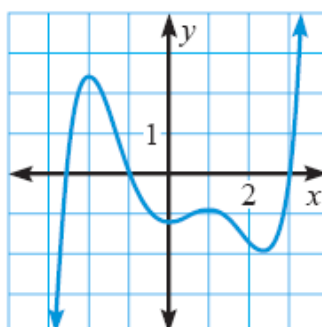
2)



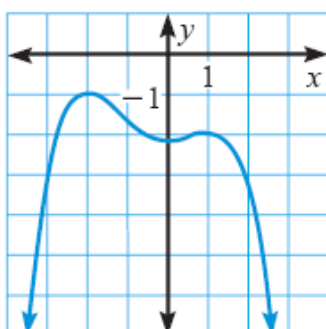
3)



4)



5)



6)

