Name: _____   Date: _____

Instructions: Though calculators can be used for the entire daily question, all problems require you to show your work.   Any answer without proper justification will receive ***ZERO*** credit. Only **EXACT** answers will receive full credit unless otherwise noted.

1. Given $g(x) = \dfrac{1}{4}x^4 + \dfrac{1}{3}x^3 - 4x^2 - 12x + 7$ on [-4, 5], determine

  a) The critical points

  b) The local extrema values and where they occur

  c) The absolute extrema values and where they occur

2. Given $h(x) = \dfrac{\ln x}{x}$, determine

    a) The critical points

    b) The local extrema values and where they occur

    c) The absolute extrema values and where they occur