Quiz 8   Calculus 1   10/21/2002

Each problem is worth 5 points. Show complete justification for full credit.

1. Use the derivative to find all local maximum and minimum **values** of $f(x) = x^3 - 6x^2 - 15x + 7$.

2. Use the derivative to find the **exact x value** where the minimum of $g(x) = x \ln x$ occurs.