

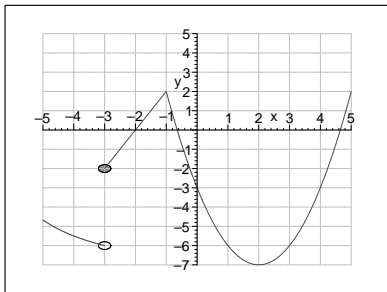
Business Calculus
Mett

Math 121
March 7, 2003

NAME: _____

row: _____ (count from your left)

1. Consider the function f displayed in the graph below.



- (a) List ALL critical numbers for the function f : $x = -3, -1, 2$
 (b) List ALL open intervals on which f is **increasing**: $(-3, -1)$ and $(2, 5)$
2. Consider the function $g(x) = \frac{2x^3}{3} + x^2 - 6x - 15$

- (a) List ALL critical numbers for the function g :
 $x = \frac{-1 \pm \sqrt{13}}{2}$
 (b) List ALL open intervals on which g is **increasing**:
 $\left(-\infty, \frac{-1 - \sqrt{13}}{2}\right)$ and $\left(\frac{-1 + \sqrt{13}}{2}, \infty\right)$