

MATH 251, Section \_\_\_\_\_  
Thursday, Sept. 27, 2013

Quiz 4 (Sections 12.3, 12.4).  
Dr. M. Vorobets

NAME (print): \_\_\_\_\_

**No credit for unsupported answers will be given. Calculators can be used for simple arithmetic operations only! Clearly indicate your final answer**

1. *[5 pts.]* Find all second partial derivatives of the function  $f(x, y) = x^3 \ln(x - y)$ .

2. [5 pts.] Use differentials to approximate the number  $\sqrt{0.99}e^{0.02}$