

**Math 207 Quiz #2**  
**April 12, 2011**

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

Show all work and answers on a separate sheet. Put a box around your final answer.

1. Solve the following. You can leave your answers defined implicitly.

(a) (5 pts.)  $x^2 \frac{dy}{dx} = e^x - 3xy$

(b) (5 pts.)  $\frac{1}{t^4+1} \cdot \frac{dy}{dt} - t^3 \cos^2 y = 0$  with  $y(1) = \pi$ .