Math 220 (section BD2)  
Quiz 1  
Spring 2012

Name ____________________________________________

• No calculators allowed.
• Show sufficient work to justify each answer.
• You have 15 minutes for this quiz.

1. (2 points each) Graph the following functions by hand, not by plotting points.
   (a) \( f(x) = 2e^{-(x+2)} + 1 \)
   (b) \( g(x) = 3(x + 1)^2 \)

2. (2 points) Find the values of \( x \) in the interval \([0, 2\pi]\) that satisfy.
   \[ 2 \cos x = -1 \]
3. (2 points each) Find the domain of the functions.

(a)

\[ f(x) = \frac{1}{\sqrt{x^2 - 9}} \]

(b)

\[ f(x) = e^{3x^2 - 1} \]