Quiz 9

MATH 139-01 and -02
Tuesday, October 7, 2003

Be sure to show your work. Unsupported answers receive no credit.

1. Determine whether each function is continuous at \( x = 2 \). State in each case whether it is or it isn’t continuous at \( x = 2 \).

   (a) \( f(x) = x^2 - 4 \)

   (b) \( f(x) = \frac{1}{x^2 - 4} \)

2. Use the definition of the derivative to show that the derivative of \( f(x) = 3x - 2 \) is 3.