Math 201 - Quiz #3   Name: _____

1. Compute the derivative for each of the following. Full simplification is not necessary, but your final answer should not have any derivatives.

   (a) $f(x) = 3x^4 - 2e^x + 3$

   answer: [   ]

   (b) $g(t) = \pi + \ln(3) - 6$

   answer: [   ]

   (c) $y = \dfrac{e^x}{x^2 + 1}$

   answer: [   ]

   (d) $y = e^x \sqrt{x} + x$

   answer: [   ]

2. Find an equation for the tangent line to $f(x) = \sqrt{x}$ through the point $(4, 2)$.

   answer: [   ]