Name: _____

Math 135, Quiz # 5, Febuary 24, 2014

1. Find the derivative of $g(x) = \sin^2(x) + \cos^2(x) + \sin(x)\cos(x)$. Simplify your answer.

2. Let
$$h(x) = \frac{\cos(x)}{e^x}$$
. Find $h'(0)$.

3. Find all x-coordinates at which the function $f(x) = 2x^3 + 21x^2 - 48x + 17$ has a horizontal tangent.