Math 105A/B Quiz Five

Name: ____________________

1. Find the unique solution to the IVP \( f'(x) = 0.06f(x), \ f(0) = 100. \)

2. Evaluate the limit below by recognizing it as the definition of a derivative.

\[
\lim_{t \to 0} \frac{e^t - 1}{t}
\]

3. Find an antiderivative of \( g(x) = 4 \sin x + 3 \cos 2x. \)