Math 201 - Quiz #9 Name: _____

1. Find $f(x)$ if $f''(x) = e^x + \cos(x)$, $f'(0) = 1$, and $f(0) = 4$.

2. Find the most general antiderivative of the following:

   (a) $f(x) = \dfrac{5x^2 + x - \sqrt{x} + 1}{x}$

   (b) $f(x) = 4x^2(x-3)^2$

3. Find $f(x)$ if $f'''(x) = 2e^x$.