Quiz 8

Name: _____

1. Solve the following integrals. [You do not need substitution for these integrals.]

   (a) $\displaystyle \int \frac{1}{x^{1/4}} \, dx$

   (c) $\displaystyle \int x^4 \, dt$

   (b) $\displaystyle \int e^{3t} \, dt$

   (a) same as $\displaystyle \int x^{-1/4} \, dx = \frac{4}{3} x^{3/4} + C$.

   (b) $\frac{1}{3} e^{3t} + C$, since you need to cancel the 3 from the chain rule.

   (c) since the integration variable is t, the integral is $x^4 t + C$. Notation is important!