

**Quiz 1, August 23, 2016**

Find  $\int_0^{\ln 2} e^{3x} dx$ .

**Answer:**

$$\int_0^{\ln 2} e^{3x} dx = \frac{1}{3} e^{3x} \Big|_0^{\ln 2} = \frac{1}{3} (e^{3 \ln 2} - e^0) = \frac{1}{3} (2^3 - 1) = \boxed{\frac{7}{3}}.$$