



Lesson 5.2 – Derivative and Antiderivative of e^x

1. Find the derivative of each function.

(a) $y = e^x$

(b) $y = x^2 e^{-x}$

(c) $y = \frac{5e^{t^2}}{1-3t^2}$

2. Evaluate each integral.

(a) $\int e^x dx$

(b) $\int e^{kx} dx$

(c) $\int 10e^{-5t} dt$