Math 1B 207 DIS Quiz 1

31 Jan 2018

Name: _____ Score: _____

1. Evaluate each of the following integrals.

   (a) $\int x \cos x dx$ (2 points)

   (b) $\int_1^e t^3 \ln t dt$ (2 points)

(c) $\int e^y \sin(3y)dy$ (3 points)

2. Show that $\int_0^{\pi/2} \cos^n xdx = \frac{n-1}{n} \int_0^{\pi/2} \cos^{n-2} xdx$ for $n \geq 2$, using integration by parts. (3 points)