

Math 4B Quiz  
January 6, 2016

Names: \_\_\_\_\_ Score: \_\_\_\_\_ /1

Circle which section you attend: 4pm 5pm 6pm 7pm

**Directions:** Open book, open note, open neighbor. No phones or calculators.

*Disclaimer: The content and level of difficulty of this quiz are not guaranteed to be in correlation with the midterm nor final examinations in any form.*

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1. Evaluate the following derivatives:

(a)  $\frac{d}{dx} x^{100}$

(b)  $\frac{d}{dx} (xe^x)$

(c)  $(\sin^{-1}(2x))'$

2. Evaluate the following integrals:

(a)  $\int \frac{1}{1+x^2} dx$

(b)  $\int (x^{10} - \frac{1}{x^2} + e^x - \cos x) dx$

$$(c) \int \frac{1}{x} dx$$

$$(d) \int \tan x dx$$

$$(e) \int x \sin x dx$$