

Name:

## Math 116 Practice Exam 1 Answers

1) a)  $e^{\tan(x)} \sec^2(x)$

b)  $\frac{\sin(x)}{1 + \cos^2(x)}$

c)  $\frac{x^4}{\ln(2)}(4 + 5 \ln(x^4))$

2)  $9.71325 \times 10^{-10}$  mcg

3) a)  $\ln |1 + \tan(x)| + C$

b)  $-\frac{e^{-7x}}{2401}(343x^3 + 147x^2 + 42x + 6) + C$

4) a)  $-1/7$

b)  $-2/\pi$

c)  $e^4$

5) a)  $1/32$

b)  $\frac{1}{12}(-14 - \pi + 130 \arctan(8))$