

Name:

Math 116 Practice Exam 1 Answers

1) a) $e^x(\cos(x) - \sin(x))$

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

c) $\frac{3x^2 16^{\sin(x)}}{x^3 + 1} + 16^{\sin(x)} \cos(x) \ln(16) \ln(1 + x^3)$

2) Ford, \$18123.80

3) a) $\frac{100}{19} \ln|11 - x| + \frac{71}{19} \ln|8 + x| + C$

b) $\frac{e^{4x}}{128}(224x^3 - 168x^2 + 3764x - 1165) + C$

4) a) $1/2$

b) 7

c) $1/e^3$

5) a) $\ln(2) - 3/8$

b) $\ln(3\sqrt{3}/4)$