

# MAT136H1F – Quiz 1

TUT5101 – T5 (TA: A. Stewart)

Fall, 2014

FAMILY NAME: .....

GIVEN NAME: .....

STUDENT ID: .....

Mark your lecture and tutorial sections:

L0101 (morning)	L5101 (evening)	T0101 (M3)	T0102 (R4)	T5101 (T5)	T5201 (R5)
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You have 15 minutes to solve the problems. Each problem is worth 2 points. Good luck!

**Question 1.** Write the integral  $\int_0^1 xe^{-x^2} dx$  as a limit of Riemann-sums.

**Question 2.** Find  $\int \frac{\arctan(r)}{1+r^2} dr$ .

**Question 3.** Let  $f(x) = \int_{e^x}^{\pi} \log t dt$ . What is  $\frac{d}{dx} f(x)$ ?