

MAT136H1F – Quiz 2

TUT5201 – R5 (TA: B. Navarro Lamedá)

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. *Suppose that a region S has x -cross sections of length $A(x)$ and is bounded by $x = 0$, $x = 1$. Write the volume V of the solid generated by rotating S around $x = 2$ as an integral.*

Question 2. *Find $\int \arctan(x)dx$. (Hint: integrate by parts.)*

Question 3. *Suppose that the integral of a continuous function f is 8 on the interval $[3, 7]$. What value must be taken on by f ? Explain briefly (in very few words).*