

Name: _____ Section Number: _____

TA Name: _____ Section Time: _____

Math 20B.
Midterm Exam 1
April 28, 2006

No calculators or any other devices are allowed on this exam.

Write your solutions clearly and legibly; no credit will be given for illegible solutions.

Read each question carefully. If any question is not clear, ask for clarification.

Answer each question completely, and show all of your work.

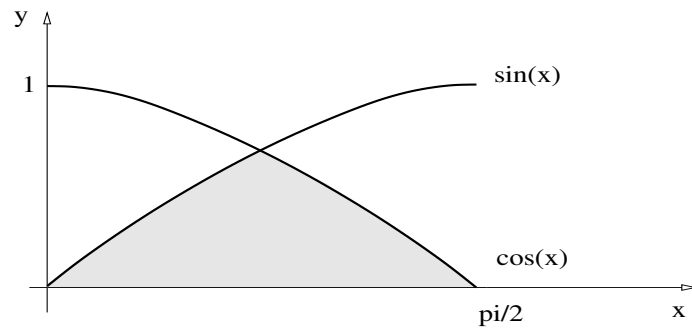
1. (10 points) Evaluate the following integrals.

(a) $\int_0^{\pi/3} \frac{\sin(\theta)}{\cos^2(\theta)} d\theta$

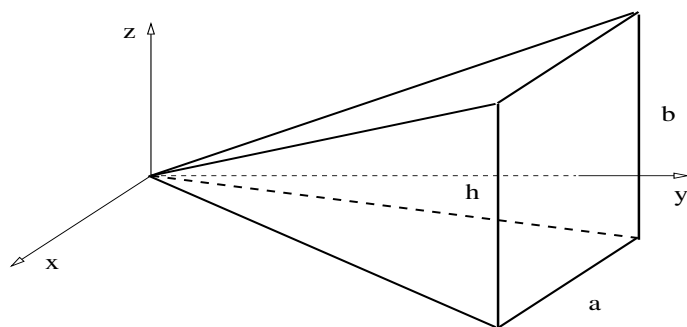
(b) $\int \frac{1+x}{1+x^2} dx$

#	Score
1	
2	
3	
4	
Σ	

2. (10 points) Find the area of the shaded region



3. (10 points) Find the volume of a pyramid with rectangular base of sides a and b , and height h .



4. (8 points) Compute both $(1 + i)^8$ and $(1 + i)^{10}$.