

Technique Test for Mathematics 1b

Spring, 2002

Name: _____

You have one hour for this exam. Work carefully and efficiently. Do not spend an inordinate amount of time on any one problem. Think clearly and do well!

Problem	Points	Score
1	3	
2	3	
3	3	
4	3	
5	3	
6	3	
7	3	
8	3	
Total	24	

Please show all your work on this exam paper. You must show your work and clearly indicate your line of reasoning in order to get full credit. If you have work on the back of a page, indicate that on the exam cover.

Please circle your section.

MWF 10 Dmitry Tamarkin

MWF 10 Jake Rasmussen

MWF 11 Stephen Debacker

MWF 11 Amanda Alvine

TTH 10 Jim Propp

TTH 11:30 Huan Yang

Technique Test

Find the following. Please show your work.

1. $\int \frac{x+5}{x^2-2x-3} dx$

2. $\int_1^e x^2 \ln x dx$

3. $\int \frac{x}{\sqrt{x^2+1}} dx$

4. $\int_0^1 \frac{dx}{\sqrt{4-x^2}}$

5. $\int \sin x e^x dx$

6. $\int \frac{x^2 + 1}{x^2 - 1} dx$

7. $\int_e^{e^3} \frac{1}{x \ln x} dx$

8. $\int_0^4 e^{\sqrt{x}} dx$