CALCULUS II Fall 2002 October 22, 2002 7:30 p.m.

Name _____ Student Number _____

Recitation Instructor _____ Hour _____

Problem #	Grade
1	
2	
3	
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15	
Total	

7 points each: total = 105

1. Evaluate $\lim_{x\to+\infty} e^{-x} ln(x)$

2. State the definition of $\cosh(x)$

3. Evaluate $\int x \sinh(x^2) dx$

4. Differentiate $\cosh(e^{x^2})$

5. Evaluate $\int \frac{dx}{\sqrt{4x^2+9}}$

6. Evaluate $\int \frac{dx}{4-x^2}$

7. Evaluate $\int x^2 e^{2x} dx$

8. Evaluate $\int \sin^2 3\theta d\theta$

9. Evaluate $\int \cos^5(x) dx$

10. Evaluate $\int \sin^2 x \cos^2 x dx$

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

12. Evaluate $\int \frac{x^3}{\sqrt{1-x^2}}\ dx$

13. Evaluate $\int \sqrt{1+4x^2}\ dx$

14. Evaluate $\int \frac{2x+3}{x^2+4x+5}\ dx$

15. Evaluate $\int \frac{x+3}{\sqrt{3-2x-x^2}}\ dx$