

Content for final exam

<u>Topics</u>	<u>Exercise</u>	<u>Percentage included in the final exam</u>
1. Continuity and points of discontinuity. Types of discontinuity	1.5(1-6,11-22,29,30,35,36)	3%
2. Derivative of trigonometric and logarithm function	2.5 (1-24)	2%
3. Chain rule	2.6 (7-40)	8%
4. Implicit differentiation	3.1 (3-18,25-28)	10%
5. L' Hospital Rule	3.6 (7-45)	10%
6. Absolute Maxima and Minima	4.4 (7-16)	4%
7. Riemann sums and definite integral	5.5 (13-24)	3%
8. Area bounded by the curves	6.1 (1-18)	10%
9. Volume by Disk and washer method	6.2 (1-26)	
10. Basic Integration 11. Trigonometric substitution 12. $u = \tan(x/2)$ substitution	7.1 (1-30) 7.4 (1-25,37-48) 7.6 (65-70)	10%
13. Integration by parts and Reduction formula	7.2 (1-30, 61,62,63)	5%
14. Integration of Rational function by Partial fraction	7.5 (9-30)	5%
15. Improper integrals	7.8 (3-32)	10%
16. Parametric equations of lines in 3D, Plane in 3-space	11.5(3-10,15-22,29-34)	10%
17. Distance Problems involving planes, Intersecting planes.	11.6(11-20, 41-48)	10%