Math 251 Final Exam--Extra Exam Preparation.

1. State the nth Term Test.

2. State the theorem regarding bounded sequences.

3. What does it mean for a series to be geometric?

4. How do you know when an infinite geometric series diverges/converges?

5. Integration problems from
   8^{th} edition pages 589-590:
   1-11, 13, 19, 20, 26, 28, 33-37, 49, 55, 56.
   9^{th} edition pages 591-592:
   1-13, 15, 21, 22, 28, 30, 35-39, 51, 57, 58

6. Limit Problems
   8^{th} edition 73-76 from page 590.
   9^{th} edition 75-78 from page 592.

7. Express the following in terms of the exponential function:
   sinh(x), cosh(x), tanh(x), coth(x), sech(x), csch(x).

8. Series problems (remember Justify your answers) from
   8^{th} edition page 689 nos. 41, 42, 44-51.
   9^{th} edition page 690 nos. 43-59.

9. Power series problems from
   8^{th} edition pages 689-690:
   57, 58, 65-70, 73-81, 83, 97, 98, 100.
   9^{th} edition pages 691-692:
   65-66, 73-78, 81-89, 91, 105, 106, 108.

10. Solid of Revolution problems from
    8^{th} edition page 463-464 nos. 11-32.
    9^{th} edition page 465-466 nos. 11-32.

11. Arc Length problems from
    8^{th} edition page 483 nos.3-24.
    9^{th} edition page 485 nos.3-26.

12. Parametric equations and polar coordinates from
    8^{th} edition pages 756-758:
    25-33, 37-44 (skip c), 47-50, 53-54 57-60 63-76
    9^{th} edition pages 756-758:
    25-35, 39-46 (skip c), 49-52, 55-56 59-62 65-80