

**HOMEWORK FOR MATH208, CALCULUS II, SPRING 2011
WITH DR. CHRISTOPHER E ELMER
USING THOMAS' CALCULUS, 11TH, MEDIA UPGRADE**

To be successful in learning calculus one should work as many problems as possible. You are expected to have a complete understanding of the following list of problems.

Applications

6.5 Surface Area: 1 - 20.

6.6 Work: 1 - 32.

Transcendental Functions

7.1 Inverse Functions: 1 - 37 odd, 39 - 50.

7.2 Natural Logarithm: 1- 67 odd, 69 -77.

7.3 Exponential: 1 - 61 odd, 67 - 76.

7.4 a^x and $\log_a x$: 1 - 75 odd, 87, 91 - 100.

7.5 Growth and Decay: 1 - 12.

7.6 Relative Rates: 1 - 8.

7.7 Inverse Trig: 1 - 116 odd, 125, 126, 127, 133 - 137 odd.

7.8 Hyperbolic Functions: 2 - 10 even, 11 - 59 odd, 67 - 73 odd, 75, 79 - 83.

Techniques of Integration

8.1 Recall Int Skills: 1 - 82, 87, 89, 91, 95, 96.

8.2 Integration by Parts: 1 - 29 odd, 32, 33, 37, 39 - 42.

8.3 Partial Fractions: 1 - 39 odd.

8.4 Trigonometric: 1 - 37 odd.

8.5 Trigonometric Sub: 1 - 35 odd, 43 - 51 odd.

8.6 Tables: 1 - 91 odd.

8.7 Numerical: 1 - 25 odd, 28, 30, 33.

8.8 Improper: 1 - 63 odd.

Polar Coordinates

10.5 Polar Coordinates: 1 - 61 odd, 64.

10.6 Graphing: 1 - 15 odd, 17 - 24, 31 - 37 odd.

10.7 Areas and Lengths: 1 - 31 odd.

Infinite Sequences and Series

11.1 Sequences: 1 - 83 odd, 85, 87, 90, 101 - 111, 129 - 139 odd.

11.2 Series: 1 - 57 odd.

11.3 Integral Test: 1 - 29 odd.

11.4 Comparison Test: 1- 36 mod 3.

11.5 Ratio-Root Tests: 1- 44 even.

11.6 Alt, Abs, and Cond: 1 - 51 odd.

11.7 POWER: 1 - 31 odd.

11.8 Taylor: 1 - 20.

11.9 Taylor Error: 1 - 18.