**Math 106**

**Text book: Calculus, the Classic edition, Fifth Ed. By Earl W. Swokowski.**

**All proofs are NOT included.**

Chapters: 5, 6, 7, 8, 9, 10, 13.

**Chapter 5:**

**5.1** All except (Examples 6, 7, 8, 9).

**5.2** All.

**5.3** Summation notation (5.9), Example 1, Theorem (5.10), Example 2, Theorems (5.11) & (5.12), Examples 3 & 4, Restate Example 6: Find the area using limit of Riemann sum and right endpoints (This could be solved after Section 5.4).

**5.4** All except (Definition 5.15, Example 3).

**5.5** All except (Definition 5.29, Example 6).

For Corollary (5.27): Solve extra examples using algebraic methods.

Without solving the integral prove that:

(a) (b) .

(c) (d)

**5.6** Fundamental theorem of calculus(5.30), Corollary (5.31), Examples 1,2,3 & 4,Theorem (5.33), Examples 5 & 6, Theorem (5,35), Example 8, Exercises (51,52,53,55).

**5.7** All except error est. trap. rule( 5.37), Ex. 1, error est. Simp.(5.39), no est. of error in Ex. 2.

**Chapter 6:**

**6.1** All.

**6.2** All except Example 4.

**6.3** All except Example 2.

**6.5** All except (Definition 6.16, Theorem (6.17), Example 3, (6.18)).

**Chapter 7:**

**7.2** All except Example 7.

**7.3** All except Examples 3&4.

**7.4** All except Example 5.

**7.5** All except (Example 3, Theorem 7.32).

**Chapter 8:**

**8.2** All except Example 1.

**8.3** All except Example 2.

**8.4** All.

**Chapter 9:**

**9.1** All.

**9.2** All except 7.

**9.3** All.

**9.4** All.

**9.5** All.

**9.6** Examples 1, 2 & 4.

**Chapter 10:**

**10.3** All except Example 4.

**10.4** All except Example 5.

**Chapter 13:**

**13.1** All except Examples 4,5 & 6.

**13.3** All except ((13.9), Theorem 13.10, Example 9).

**13.4** All except ((13.13), Example 3, (13.14), Example4).