Homework 10

1. Section 4.5: Evaluate $\displaystyle\lim_{x\to 0^+}\frac{e^{-\frac{1}{x}}}{x^\pi}$.

2. Section 4.6: problems 12, 27, 67(a).

3. Section 4.8: Problems 79, 80, 84, 95, 103, 107, 109 127, 128.

4. Section 5.1: problem 22.

5. Section 5.2: problem 45.

   Hint: $\displaystyle\sum_{k=1}^{n} k^3 = \left(\frac{n(n+1)}{2}\right)^2$