You should do the problems from the book first and check your answers to be sure you understand the methods.

Problems in section 10.3 may not be due until the week after, check with your instructor

Book problems:

Section 10.1  #25, 27, 31, 37, 77
Section 10.2  #3, 11, 15, 27, 37, 77
Section 10.3  #3, 5, 9, 23, 25

Hand-in problems:

Section 10.1  28, 32, 50, 64, 72, 79, 112, 114
Section 10.2  2, 10, 16, 24, 30, 32, 36, 76

A  Decide if the following sequences diverge or converge (in which case find the limit):
\[ a_n = \frac{1 + n^5}{1 + 2n^2 + 3n^4 + 4n^5}, \]
\[ b_n = \sin(\pi n) + \cos(\pi n). \]

B  Evaluate \( \sum_{n=3}^{\infty} \frac{5+2^n}{4^n} \).

C  Evaluate \( \sum_{n=1}^{\infty} \frac{1}{n(n+2)} \).

Section 10.3  16, 34, 38, 48