

361-Homework 1, Due September 12

All the problems (except for the last for which you have to consult your calculus book) are in chapter 2. Number 26 is for extra credit. Solve 3 of the 5 first problems and discuss the rest with your partner.

1. 5

2. 8

3. 10

4. 14

5. 15

6. 26

7. Let $0 < q < 1$. Show that $\sum_{n \geq 0} q^n = \frac{1}{1-q}$.