

Announcements

Our final examination will take place in LS 107, on Wednesday, May 2, from 4-6 pm.

Problems

1. Textbook Problems: 6.1.22, 6.1.30, 6.1.32, 6.1.34, 6.1.36, 6.1.54, 6.1.58
2. Textbook Problems: 6.2.12, 6.2.40, 6.2.42, 6.4.48, 6.2.50, 6.2.71, 6.2.72, 6.2.82, 6.2.84
3. Find the sum from the 101st term to the 200th term of the arithmetic sequence 12, 9, 6, ...
4. Consider the geometric sequence

$$1, 3, 9, \dots$$

- a) What is its common ratio?
 - b) Find the sum from its 6th term to its 10th term.
 - c) What is sum of the first n th terms?
 - d) Does it make sense to consider the sum of the entire sequence, i.e. taking the *infinite* sum?
Hint: Does the answer in the preceding part approach a value as n becomes arbitrarily large?
5. Consider the geometric sequence

$$1, \frac{1}{2}, \frac{1}{4}, \dots$$

- a) What is its common ratio?
- b) What is the sum of the first 10 terms?
- c) What is sum of the first n th terms?
- d) Does it make sense to consider the sum of the entire sequence, i.e. taking the *infinite* sum?