**Lecture 5**

1. For the given sequences

* determine the first three terms
* determine the minimum, maximum, infimum and supremum
* decide the boundedness of the sequence
* sketch the graph of the first three terms

a) b)

2. Calculate the following limits:

|  |  |
| --- | --- |
| a) |  |
| b) |  |
| c) |  |
| d) |  |
| e) |  |
| f) |  |
| g) |  |
| h) |  |
| i) |  |
| j) |  |
| k) |  |
| l) |  |
| m) |  |

3. Determine whether the given geometric series is convergent and, if so, determine its sum.

|  |  |
| --- | --- |
| a) |  |
| b) |  |