**Math 201** Quiz I **---** Double Sample **---- Part I** (about 70 %) *N. Nahlus*

1) Find the following limits. Justify your answer.





**2)** Investigate convergence/divergence of the following series (with LCT problems using Table p. 602)

Warning: The hints/tricks below will not be given on the Quiz (but very easy to remember!)

 (Warning: “getting closer to 1” does not work) 





i) 

**3)** a)Find according to the values of c the series sum  (Telescopic)

b) Find the infinite sum (if possible) of 

c) What can you say about

(Hint: One of the cases of convergent /divergent is easily seen to be impossible!)

**4)** Find the domain of convergence of the following power series. Also indicate absolutely or conditionally.

a)  b) 