|  |  |
| --- | --- |
| Group Quiz 5 – Just extra practiceDusty Wilson Math 153 No work = no credit | **Name**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Find the Taylor series generated by  at as well as its interval of convergence and radius of convergence. You may assume the existence of the series.

Find a power series representation for , its interval of convergence, and its radius of convergence.

You plan to estimate  by evaluating the Maclaurin series for  at . Use the methods developed in this course to determine the minimum number of terms of the series you would have to add to be sure the estimate is good to within 0.01 of the actual result.