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| Group Quiz 5Dusty Wilson Math 153 No work = no credit | **Name**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Determine whether the series  is convergent or divergent.

Find the values of *x* for which the series  converges and find the sum of the series for those values of *x*.

Cool things happen in infinite series. For example, ?!?! Use the methods developed in this course to find a value of *n* that will ensure that the error in the approximation  is less than 0.00005.