

Quiz 3a**Calculus 2****3/1/04**

Each problem is worth 5 points. For full credit provide proper justification for your answer.

1. Find the sum of the series $1 - x + x^2 - x^3 + x^4 - \dots$

2. Express the sum $1 + \frac{1}{3} + \frac{1}{9} + \dots + \frac{1}{3^n}$ in terms of n .