

Name _____

Homework 12

Section 9.2

1. (7) Compute the exact sum of the geometric series $200 + 20 + 2 + 0.2 + 0.02 + 0.002 + \dots$

2. (6) Is the sum $\sum_{n=1}^{22} (-2)^n$ finite or infinite? Explain. If it is finite, also compute the sum (using an appropriate formula).

3. (7) Find the exact sum of $\sum_{n=0}^{\infty} \frac{4 + 6^n}{8^n}$. *This one may be a bit tricky.*