

Name:

Section: 7 8

1. Find the first five terms of the sequence of n -th partial sums $\{s_n\}$ for the harmonic series $\sum_{n=1}^{\infty} \frac{1}{n}$.

2. Find the sum of the following series, or state that it diverges.

(a)
$$\sum_{n=2}^{\infty} \frac{3^n}{8}$$

(b)
$$\sum_{n=1}^{\infty} \frac{2^n - 1}{5^n}$$

(c)
$$\sum_{n=2}^{\infty} \left(\frac{1}{\ln n} - \frac{1}{\ln(n+1)} \right)$$

3. Have a nice Spring break!