

For each series,

- (a) Compute the first 6 values in the sequence of terms of the series
- (b) Compute the first 6 values in the sequence of partial sums of the series
- (c) Does the sequence of *terms* converge or diverge?
- (d) Do you think the *series* converges or diverges?

$$1. \sum_{k=0}^{\infty} \frac{2k+1}{7k+3}$$

$$2. \sum_{k=0}^{\infty} \frac{1}{k!}$$

$$3. \sum_{k=0}^{\infty} (-1)^k \frac{1}{(2k+1)!}$$