

# Sequences and Series

## Question

Which of the following is the greatest sum?

(a)

$$\sum_{n=-1}^0 2^{n-1}$$

(b)

$$\sum_{n=0}^1 2^{n-1}$$

(c)

$$\sum_{n=1}^2 2^{n-1}$$

(d)

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

Answer: (d) Focus on rules of exponents. This problem expects students to think about the limits of the summation.