

Corrigé

$$\mathbf{a)} S = 1 + 3 + 3^2 + \dots + 3^{12}$$

$$S = \frac{1 - 3^{13}}{1 - 3}$$

$$S = 797\,161$$

$$\mathbf{b)} S = 1 - 2 + 4 - 8 + 1\,024 - 2\,048$$

$$S = 1 + (-2) + (-2)^2 + \dots + (-2)^{11}$$

$$S = \frac{1 - (-2)^{12}}{1 - (-2)}$$

$$S = -1\,365$$