Ejercicio 51

> Calcula los términos a_1 y a_3 de las progresiones geométricas de término general:
>
> a) $a_n = (-2) \cdot 3^n$
>
> b) $b_n = 5 \cdot 2^n$
>
> c) $c_n = \dfrac{1}{5} \cdot \left(\dfrac{1}{2}\right)^{n+1}$
>
> d) $d_n = 3 \cdot (-1)^{n+2}$

Solución.

a) $a_n = (-2) \cdot 3^n$

$$a_1 = (-2) \cdot 3^1 = -6 \qquad \& \qquad a_3 = (-2) \cdot 3^3 = -54$$

b) $b_n = 5 \cdot 2^n$

$$b_1 = 5 \cdot 2^1 = 10 \qquad \& \qquad b_3 = 5 \cdot 2^3 = 40$$

c) $c_n = \dfrac{1}{5} \cdot \left(\dfrac{1}{2}\right)^{n+1}$

$$c_1 = \frac{1}{5} \cdot \left(\frac{1}{2}\right)^{1+1} = \frac{1}{20} \qquad \& \qquad c_3 = \frac{1}{5} \cdot \left(\frac{1}{2}\right)^{3+1} = \frac{1}{80}$$

d) $d_n = 3 \cdot (-1)^{n+2}$

$$d_1 = 3 \cdot (-1)^{1+2} = -3 \qquad \& \qquad d_3 = 3 \cdot (-1)^{3+2} - 3$$

$\circ$