

Digital assignment

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1 Problem 11.9.1.9

Find a_9 in the sequence $a_n = (-1)^{n-1} \cdot n^3$

Given,

$$a_n = (-1)^{n-1} n^3 \quad (1)$$

Substitute $n = 9$ in equation 1 , to obtain the term a_9

So,

$$a_9 = (-1)^8 9^3$$

So,

$$a_9 = 729$$

Hence, the 9th term of this sequence is 729.

