

NCERT Discrete 11.9.1 Q7

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Question: Find the indicated terms in the sequence whose n th term is $x_n = 4n - 3$. Find x_{17} and x_{24} .

Solution: In the question, following information is provided:

Symbol	Value	Description
x_n	$4n - 3$	The n th term of the sequence
x_{17}	?	17th term
x_{24}	?	24th term

TABLE I
PARAMETERS

We know that $x_n = 4n - 3$. So, after substituting the values in the formula. As, $x(1)$ is the first term, we get :

$$x_{17} = 4 \times 16 - 3 = 61 \quad (1)$$

$$x_{24} = 4 \times 23 - 3 = 89 \quad (2)$$

The plot between $x(n)$ and n is :

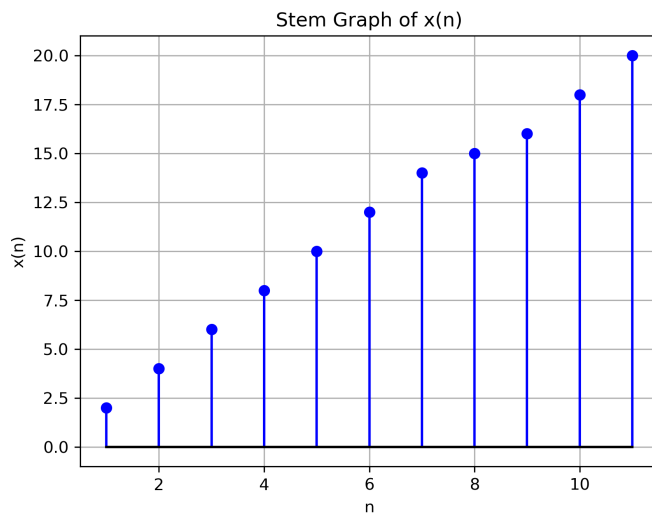


Fig. 1. $x(n)$ vs n