

# NCERT Discrete 11.9.1 Q7

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**Question:** Find the indicated terms in the sequence whose  $n$ th terms is  $a(n) = 4n - 3$ . Find  $a(17)$  and  $a(24)$ .

**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

$$x(n) = (4n - 3) u(n).$$

$$x(17) = 4 \times 16 - 3 = 61$$

$$x(24) = 4 \times 23 - 3 = 89$$

From (??),

$$X(z) = \frac{7z^{-1} - 3}{(1 - z^{-1})^2}$$

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

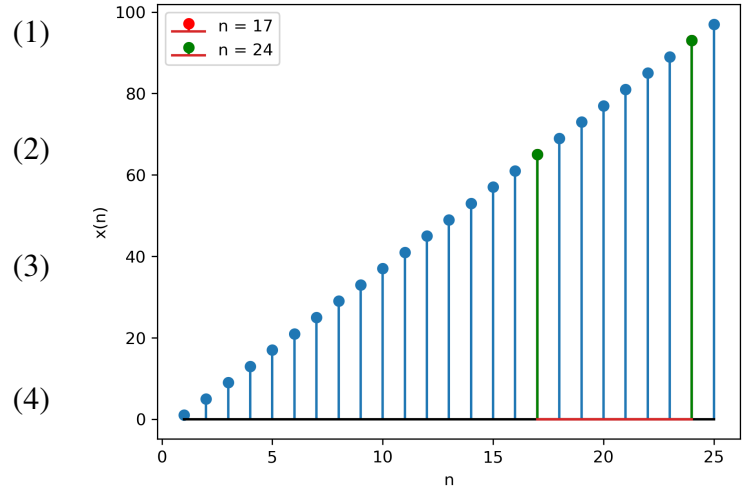


Fig. 1.  $x(n)$  vs  $n$