

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 :

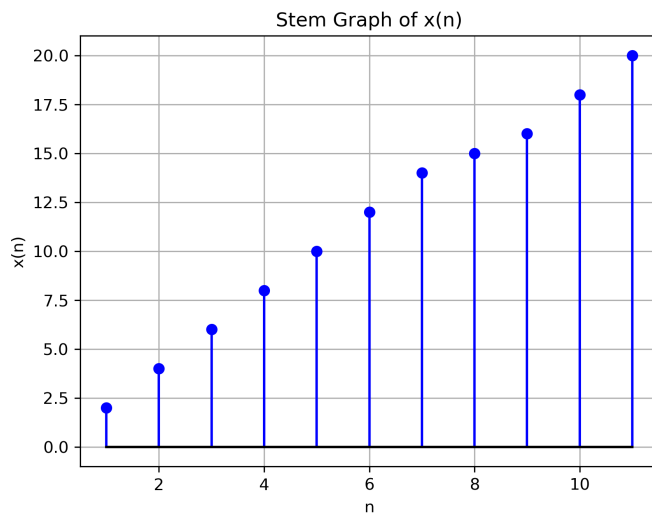


Fig. 1. $x(n)$ vs n