Assignment

11.9.5 - 22

EE23BTECH11220 - R.V.S.S Varun

QUESTION

Find the 20th term in this series.

$$2 \times 4 + 4 \times 6 + 6 \times 8 \cdots + n \, terms$$

SOLUTION

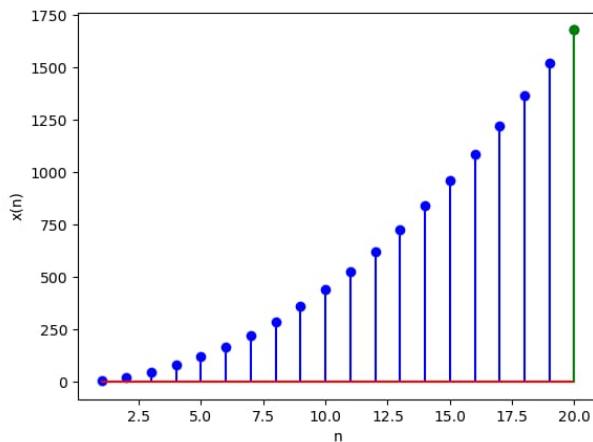| Symbol	Description
x(1)	first term of the series
x(n)	n^{th} term of the series

TABLE 0

TABLE OF PARAMETERS

Given,

$$x(n) = 4n(n+1) \qquad (1)$$

Substitute n=20 ,

$$x(20) = 4 * 20 * 21 \qquad (2)$$

$$x(20) = 1680 \qquad (3)$$

So 20th term of this series is 1680.

Graph of x(n)