

## EE23BTECH11047 - Deepakreddy P

## EXERCISE 9.1

**4** Write the first five terms of the sequence whose nth term is  $\frac{2n-3}{6}$  and obtain the Z transform of the series

**Solution:**

$$x(n) = \frac{2n-1}{6} (u(n)) \quad (1)$$

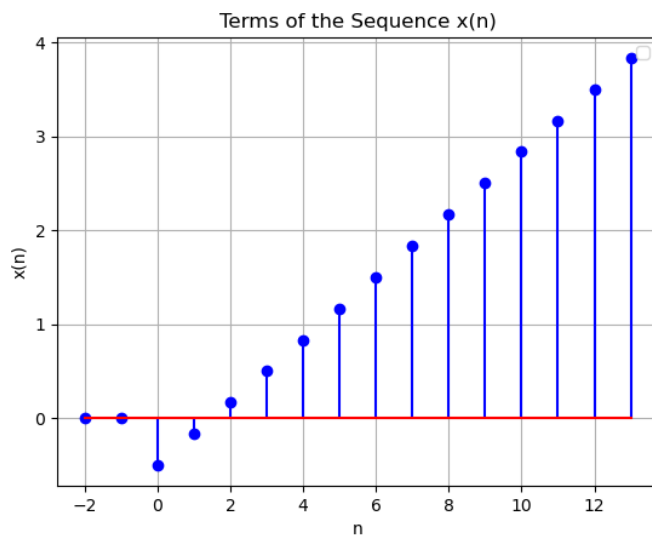


Fig. 1. Plot of x(n) vs n

$$X(z) = \frac{3z^{-1} - 1}{6(1 - z^{-1})^2} \quad |z| > 1 \quad (2)$$