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SEQUENCES
NTH-TERM FORMULAE

| A1 <br> Write down the first four terms of the sequence given by the formula: <br> $6 n$ | A2 Write down the first three terms of the sequence given by the formula: $3 n+2$ | A3 <br> Write down the $10^{\text {th }}$ term of the sequence given by the formula: $20-4 n$ | A4 <br> Write down the $51^{\text {st }}$ term of the sequence given by the formula: $\frac{n+5}{2}$ |
| :---: | :---: | :---: | :---: |
| B1 <br> Write down the first five terms of the sequence given by the formula: $n^{2}$ | B2 <br> Write down the first four terms of the sequence given by the formula: $n^{2}-3 n$ | B3 <br> Write down the $15^{\text {th }}$ term of the sequence given by the formula: $n(n+1)$ | B4 <br> Write down the $99^{\text {th }}$ term of the sequence given by the formula: $(n+2)(n-3)$ |
| C1 <br> Write down the first four terms of the sequence given by the formula: $3^{n}$ | C2 <br> Write down the first five terms of the sequence given by the formula: $2^{n}-1$ | C3 <br> Write down the $10^{\text {th }}$ term of the sequence given by the formula: $4 \times 2^{n}$ | C4 <br> Write down the $100^{\text {th }}$ term of the sequence given by the formula: $(-1)^{n}$ |
| D1 <br> Write down the first six terms of the sequence given by the formula: $n^{3}$ | D2 <br> Write down the first four terms of the sequence given by the formula: $\frac{n-1}{3}$ | D3 <br> Write down the $11^{\text {th }}$ term of the sequence given by the formula: $(n+1)(n-3)(n+5)$ | D4 <br> Write down the $19^{\text {th }}$ term of the sequence given by the formula: $\frac{n^{2}+5}{n-4}$ |


| A1 <br> Write down the first four terms of the sequence given by the formula: $\begin{gathered} 6 n \\ 6,12,18,24 \end{gathered}$ | A2 <br> Write down the first three terms of the sequence given by the formula: $\begin{gathered} 3 n+2 \\ 5,8,11 \end{gathered}$ | A3 <br> Write down the $10^{\text {th }}$ term of the sequence given by the formula: $\begin{aligned} & 20-4 n \\ & 20-4(10)=-20 \end{aligned}$ | A4 <br> Write down the $51^{\text {st }}$ term of the sequence given by the formula: $\frac{n+5}{2}=\frac{(51)+5}{2}=28$ |
| :---: | :---: | :---: | :---: |
| B1 <br> Write down the first five terms of the sequence given by the formula: $\begin{gathered} n^{2} \\ 1,4,9,16,25 \end{gathered}$ | B2 <br> Write down the first four terms of the sequence given by the formula: $\begin{gathered} n^{2}-3 n \\ -2,-2,0,4 \end{gathered}$ | B3 <br> Write down the $15^{\text {th }}$ term of the sequence given by the formula: $\begin{gathered} n(n+1) \\ 15(15+1)=240 \end{gathered}$ | B4 <br> Write down the $99^{\text {th }}$ term of the sequence given by the formula: $\begin{aligned} & (n+2)(n-3) \\ & (99+2)(99-3)=9696 \end{aligned}$ |
| C1 <br> Write down the first four terms of the sequence given by the formula: $\begin{gathered} 3^{n} \\ 3,9,27,81 \end{gathered}$ | C2 <br> Write down the first five terms of the sequence given by the formula: $\begin{gathered} 2^{n}-1 \\ 1,3,7,15,31 \end{gathered}$ | C3 <br> Write down the $10^{\text {th }}$ term of the sequence given by the formula: $\begin{aligned} & 4 \times 2^{n} \\ & 4 \times 2^{(10)}=4096 \end{aligned}$ | C4 <br> Write down the $100^{\text {th }}$ term of the sequence given by the formula: $\begin{aligned} & (-1)^{n} \\ & (-1)^{100}=1 \end{aligned}$ |
| D1 <br> Write down the first six terms of the sequence given by the formula: $\begin{gathered} n^{3} \\ 1,8,27,64,125,216 \end{gathered}$ | D2 <br> Write down the first four terms of the sequence given by the formula: $\frac{n-1}{3} \longrightarrow 0, \frac{1}{3}, \frac{2}{3}, 1$ | D3 <br> Write down the $11^{\text {th }}$ term of the sequence given by the formula: $\begin{aligned} & (n+1)(n-3)(n+5) \\ & (11+1)(11-3)(11+5)=1536 \end{aligned}$ | D4 <br> Write down the $19^{\text {th }}$ term of the sequence given by the formula: $\frac{n^{2}+5}{n-4}=\frac{(1.9)^{2}+5}{(1.9)-4}=24.4$ |

