Lesson 5

Non-Calculator

Number Sequences : Year 9

5.1 A Homework on Arithmetic Progressions

For Arithmetic Progressions, $A_n = d\,n + (a - d)$ where a is the initial term and d is the common difference. Complete the following table...

Name	1st term	2nd term	3rd term	4th term	Initial term a	Common difference d	*Position-to-term* formula $A_n = d\,n + (a - d)$
A	3	5	7	9			$A_n =$
B	8	13	18	23			$B_n =$
C	9	13	17	21			$C_n =$
D					3	5	$D_n =$
E					7	2	$E_n =$
F	5					8	$F_n =$
G		17				6	$G_n =$
H			9		5		$H_n =$
I	12		16				$I_n =$
J	3	11					$J_n =$
K	13	25					$K_n =$
L					15	- 3	$L_n =$
M	13	10					$M_n =$
N		7	3				$N_n =$
O				20		3	$O_n =$
P				20		- 3	$P_n =$
Q			34	44			$Q_n =$
R	6		24				$R_n =$
S	10			43			$S_n =$
T	9	8	7	6			$T_n =$
U					13	12	$U_n =$
V							$V_n = 6\,n - 7$
W				13	4		$W_n =$
X	3	- 1					$X_n =$
Y		11		17			$Y_n =$
Z							$Z_n = 12\,n - 17$