

FINITE DIFFERENCES 1

Given the following sequence of numbers: 7, 10, 13, 16, 19, ...
 Find the value of the 54th term, nth term.

ΔX	Term #	Process Column	Value of Term	ΔY
—	0	$0(3) + \underline{\quad}$?	—
—	1	$1(3) + \underline{\quad}$	7	—
—	2	$2(3) + \underline{\quad}$	10	—
—	3	$3(3) + \underline{\quad}$	13	—
—	4	$4(3) + \underline{\quad}$	16	—
—	5	$5(3) + \underline{\quad}$	19	—
	
	54	$54(3) + \underline{\quad}$	—	
	n	$n(3) + \underline{\quad}$	—	

FINITE DIFFERENCES 2

Given the following sequence of numbers: 10, 14, 18, 22, ...
 Find the value of the 76th term, nth term.

ΔX	Term #	Process Column	Value of Term	ΔY
—	0	() + —	?	—
—	1	() + —	10	—
—	2	() + —	14	—
—	3	() + —	18	—
—	4	() + —	22	—
—	5	() + —	26	—
	
	76	() + —	—	
	n	() + —	—	

FINITE DIFFERENCES 3

Given the following sequence of numbers: 2, 9, 16, 23, 30, ...
 Find the value of 62nd term, nth term.

ΔX	Term #	Process Column	Value of Term	ΔY
—	0	_____	?	—
—	1	_____	2	—
—	2	_____	9	—
—	3	_____	16	—
—	4	_____	23	—
—	5	_____	30	—
	
	62	_____	_____	
	n	_____	_____	

FINITE DIFFERENCES 4

Given the following sequence of numbers: 6, 4, 2, 0, -2, ...
 Find the value of the 93rd term, nth term.

X'	Term #	Process Column	Value of Term	Y'
—	0	_____	?	—
—	1	_____	6	—
—	2	_____	4	—
—	3	_____	2	—
—	4	_____	0	—
—	5	_____	-2	—
	
	93	_____	_____	
	n	_____	_____	

FINITE DIFFERENCES 5

Given the following sequence of numbers: 14, 11, 8, 5, 2, ...
 Find the value of the 100th term, nth term.

X'	Term #	Process Column	Value of Term	Y'
—	0	_____	?	—
—	1	_____	14	—
—	2	_____	11	—
—	3	_____	8	—
—	4	_____	5	—
—	5	_____	2	—
	
	100	_____	_____	
	n	_____	_____	

FINITE DIFFERENCES 6

Given the following sequence of numbers: 7, 14, 21, 28, 35, ...
 Find the value of the 100th term, nth term.

X'	Term #	Process Column	Value of Term	Y'
—	0	_____	?	—
—	1	_____	7	—
—	2	_____	14	—
—	3	_____	21	—
—	4	_____	28	—
—	5	_____	35	—
	
	100	_____	_____	_____
	n	_____	_____	_____

FINITE DIFFERENCES 7

Given the following sequence of numbers: 12, 18, 24, 30, 36, ...
 Find the value of the 100th term, nth term.

X'	Term #	Process Column	Value of Term	Y'
—	0	_____	?	—
—	1	_____	12	—
—	2	_____	18	—
—	3	_____	24	—
—	4	_____	30	—
—	5	_____	36	—
	
	100	_____	_____	
	n	_____	_____	