Bellwork Alg 2B 6th hr Tuesday, December 19, 2017

Use the given formula to find the 4th, 5th, and 6th terms of each sequence.

1. $a_n = 2(n+1)^2 - 3$

2. $a_1 = 10$

$a_n = 3(a_{n-1} - 4) + 2$

Write a recursive formula for each sequence.

3. $24, 36, 54, 81\ldots$

4. $-12, -16, -20, -24\ldots$

Write an explicit formula for each sequence.

5. $8, 12, 16, 20\ldots$

6. $9, 16, 25, 36\ldots$

~~Mon 12-18-17~~
Tues 12-19-17

6TH HR

Bellwork ~~HR 2 & 3~~

(1) $a_n = 2(n+1)^2 - 3$

$a_4 = 2(4+1)^2 - 3 = 47$

$a_5 = 2(5+1)^2 - 3 = 69$

$a_6 = 2(6+1)^2 - 3 = 95$

(2) $a_1 = 10$

$a_2 = 3(10-4)+2 = 20$

$a_3 = 3(20-4)+2 = 50$

$a_4 = 3(50-4)+2 = 140$

$a_5 = 3(140-4)+2 = 410$

$a_6 = 3(410-4)+2 = 1222$

(3) 24, 36, 54, 81, ...

$a_1 = 24$

$a_n = (a_{n-1})(1.5)$

(4) $-12, -16, -20, -24, \ldots$

$a_1 = -12$

$a_n = (a_{n-1}) - 4$

(5)

n =	1	2	3	4	
	8,	12,	16,	20,	...
	2(4)	3(4)	4(4)	5(4)	

$a_n = 4(n+1)$

(6)

n =	1	2	3	4
	9,	16,	25,	36
	$(3)^2$	$(4)^2$	$(5)^2$	$(6)^2$

$a_n = (n+2)^2$