Adv Alg 2 Chapter 9 Review Name_____
Fri week 9

NO WORK = NO CREDIT!!!.....SHOW ALL WORK IN SPACE PROVIDED!

1. Write the first five terms of each sequence. $a_n = 7 - 6n$	2. Write the first five terms of each sequence. $a_1 = 6$ $a_n = 2a_{n-1} + 3$	3. Write a **recursive formula** for the following sequence 3, 11, 19, …
4. Write a **recursive formula** for the following sequence 3, -6, 12, -24,….	**5**. State whether the sequence is arithmetic, geometric or neither. If it is arithmetic, identify d, If it is geometric identify r. a. $\frac{1}{2}, \frac{1}{4}, \frac{1}{8}, \ldots$ b. $4, \frac{19}{4}, \frac{11}{2}, \frac{25}{4}, \ldots$ c. 1, 1, 2, 3, 5, ….	6. 9+7+5+…+ -179 Write the above series using ∑ notation.
7. $a_1 = 16384 \quad a_4 = -32000$ Find *r*.	8. $a_8 = -384 \quad r = -\frac{2}{3}$ Find a_1.	9. Write an explicit formula for the sequence. 13, 10, 7, 4, …..

OVER ☺

10. $a_{35} = 29 \;\; d = 4 \;\; find\; a_1.$	11. Write an explicit formula for the sequence. $4, -2, 1, -\frac{1}{2}\ldots$	12. Find the 20th term of the arithmetic sequence in which $a_4 = 15 \;\; and \;\; a_{12} = 47$
13. Find the 14th term of the geometric sequence in which $a_1 = 4 \;\; and \; a_{10} = -2048$	14. Evaluate the sum using the appropriate sigma formulas. $\sum_{k=1}^{18} 2k^2 - 4k + 3$	15. Evaluate the sum using a sum formula. $\sum_{n=1}^{10} 3(-2)^{n-1}$
16. Find S_{10} given 3,5,7,…	17. Find S_8 given 2,8,32,…	18. Find the sum: 4+ 10+ 16 +…..+70

1. 1,-5,-11,-17,-23 2.6,15,33,69,141 3.$a_1 = 3 \;\; a_n = a_{n-1} + 8$ 4. $a_1 = 3 \;\; a_n = -2a_{n-1}$ 5.a)geo r=1/2 b) arith d=3/4 c) Neither 6. $\sum_{n=1}^{95}(11 - 2n)$ 7. $r = -\frac{5}{4}$ 8. 6561 9. $a_n = 13 - 3(n-1)$ 10.$a_1 = -107$ 11. $a_n = 4\left(-\frac{1}{2}\right)^{n-1}$ 12. 79 13. -32768 14. 3588 15. -1023 16. 120 17. 43690 18. 444