

Mid Unit Review Sheet
AFM UNIT 3

Name: _____

Date: _____

Determine if the sequence is arithmetic, geometric, shifted geometric, or none.

_____ 1. 5, 11, 17, 23, 29, ... _____ 2. 9, -1, -11, -21,...

_____ 3. $a_n = 3(1.4)^n$ _____ 4. 6, 7.2, 8.64, 10.368,...

_____ 5. $\begin{matrix} u_1 = 4 \\ u_n = u_{n-1} + 7 \end{matrix}$ _____ 6. $\begin{matrix} u_0 = 4 \\ u_n = 0.89u_{n-1} + 70 \end{matrix}$

Given the sequence $a_n = -12, -8, -4, 0, \dots$

7. Find the recursive and explicit formula for the sequence.

8. Determine the 825th term: _____

9. Sum the first 142 terms: _____

Given the sequence $t_n = 2, 2.8, 3.92, 5.488, \dots$

10. Write the recursive and explicit formulas for the sequence.

11. Determine the 12th term: _____

12. Sum the first 7 terms: _____

17) $\sum_{m=1}^{10} \left(-2 + \frac{4}{3}m \right)$

18) $\sum_{n=1}^9 (7n - 17)$

$\sum_{k=1}^8 -2 \cdot 6^{k-1}$

16) $\sum_{m=1}^8 32 \cdot \left(\frac{1}{2} \right)^{m-1}$

19) $\sum_{m=1}^{35} (7m - 12)$

20) $\sum_{k=1}^{14} \left(-\frac{2}{3} + \frac{1}{2}k \right)$

$\sum_{i=1}^{10} 0.2 \cdot 5^{i-1}$

18) $\sum_{n=1}^{10} -2 \cdot 2^{n-1}$