**ALGEBRA 2 9.4 & 9.5**

**Determine if the series is arithmetic or geometric and then evaluate to the given term.**

1. 2 + 5 + 8 + 11 + …;S9 2. -3 + 6 – 12 + 24 - …;S10
2. -2 + 2 + 6 + 10 + …;S12 4. 27 + 9 + 3 + …:S100

**For each series, find the number of terms, the first term, the last term and then evaluate.**

1.  6. 

**Use summation (sigma) notation to write each series for the specified number of terms then evaluate.**

1. 1 + 3 + 5 + …; n = 7 8. 10 + 7 + 4 + …; n = 6
2. 4 + 8 + 12 + …; n = 4 10. 3 + 6 + 12 + 24 + … n = 9
3. -1 – 3 – 9 – 27 - …; n = 16 12. 64 + 32 + 16 + … n = 8

**Find out which term the given number is in the indicated sequence. BONUS QUESTIONS!!!**

1. Sn = 24,300, a1 = 13 and d = 2 14. Sn = 28,697,812, a1 = 4 and r = 3
2. Sn = 18,423, a1 = -13 and d = 5 16. Sn = 1,310,715, a1 = 5 and r = 2

