**Review WS 11.1-11.3 & 11.6 A Name:**

1. The 5th term of an arithmetic sequence is 30 and the 7th term is 44. Find the 12th term.
2. 44.06 is a term in a geometric sequence. If  , r = 1.03. Which term is it?
3. An arithmetic sequence has first term -2 and fourth term 10. How many terms of this sequence must be added to get 1566?
4. Write the sum using sigma notation: -2x + 4x2 – 6x3 + 8x4 + …- 98x49
5. Find n for the geometric series that satisfies the given conditions: 
6. Does the series converge or diverge? Find the sum if applicable. 0.25, -1.25, 6.25, …
7. Find the fifth term if 
8. The sum of an arithmetic series is 24,300. The first term is 13 and the second term is 15. How many terms must be added together to get that sum?
9. Expand: 
10. Find the term containing y10 in the expansion of (x – y2)18.
11. Find the middle term in the expansion of (x4 + 1)20.
12. Factor using the binomial theorem: 