11-1 Arithmetic Sequences

Name: _____ Time› Start: _____ Finish: _____ Total Time = _____

Determine if the sequence given is an arithmetic sequence? Simply state Yes or No.

_____ 1. 4, 7, 10, 13, 16, …

_____ 2. 7, 12, 17, 22, 27, …

_____ 3. 9, 35, 61, 89, 110 …

_____ 4. 2, 19, 36, 53, 70, …

_____ 5. 4, 8, 16, 32, 64, …

_____ 6. 1.2, 3.7, 6.2, 8.7, 11.2, …

Find the 20^{th} term of each sequence.

_____ 7. $a_{19} = 25,\ d = 4$

_____ 8. $a_{18} = 55,\ d = 6$

_____ 9. $a_{21} = 20,\ d = 6$

_____ 10. $a_{18} = -88,\ d = 2$

_____ 11. $a_{17} = 10,\ d = 3$

_____ 12. $a_{22} = 50,\ d = 33$

Find the Explicit Formula for the sequences below. The formula is $a_n = a_1 + (n-1)d$

_____ 13. 12, 14, 16, 18, 20, …

_____ 14. -10, -3, 4, 11, 18, …

_____ 15. 19, 45, 71, 97, 123, …

_____ 16. 80, 71, 62, 53, 44, …

_____ 17. -85, -72, -59, -46, -33, …

Given the first term and the common difference, find the 50^{th} term.

_____ 18. $a_1 = 4,\ d = 5$

_____ 19. $a_1 = -88,\ d = 3$

_____ 20. $a_1 = 1,\ d = \frac{1}{2}$

_____ 21. $a_1 = -8,\ d = -6$

Given the sequence, find the 35^{th} term of that sequence.

_____ 22. 7, 9, 11, 13, 15, …

_____ 23. -38, -35, -32, -29, -26, …

_____ 24. 1, 124, 247, 370, …

_____ 25. 120, 115, 110, 105, 100, …