DIRECTIONS: Find a formula for the n^{th} term of each arithmetic sequence.

1. 24, 32, 40, 48,…

2. 30, 20, 10, 0, …

3. $-3, -10, -17, -24, \ldots$

4. $-6, -1, 4, 9, \ldots$

5. 7, 11, 15, 19, …

6. $13, 4, -5, -14, \ldots$

DIRECTIONS: Find the specified term of each arithmetic sequence.

7. 4, 9, 14, 19, …; a_{21}

8. 3, 11, 19, 27, …; a_{31}

9. 100, 98, 96, …; a_{25}

10. 3, 3.5, 4, 4.5, …; a_{101}

11. $-2, -11, -20, \ldots$; a_{101}

12. $17, 7, -3, \ldots$; a_{1000}

DIRECTIONS: Find the arithmetic mean of each pair of numbers.

13. $-3, 7$

14. 2.3, 9.1

15. $\frac{4}{5}, \frac{11}{5}$

DIRECTIONS: Write each series in expanded form and find the sum.

16. $\sum_{n=1}^{6}(n+10)$

17. $\sum_{k=1}^{8} 3k$

18. $\sum_{n=1}^{6}(3n-2)$

19. $\sum_{n=4}^{10}(-2n+1)$

20. $\sum_{n=1}^{5} 6n$

21. $\sum_{k=1}^{9}(k-7)$

DIRECTIONS: Find the sum of each arithmetic series.

22. $\sum_{k=1}^{100} 5k$

23. $\sum_{n=1}^{24}(2n-1)$

24. $\sum_{j=1}^{50}(3j+2)$

25. $\sum_{m=10}^{20}(30-m)$

26. The first 100 terms of the series
4 + 7 + 10 + 13 + …

27. The first 50 terms of the series
100 + 98 + 96 + 94 + …