NAME _____ DATE_____ PERIOD _____

11-1 Practice

Arithmetic Sequences

Find the next four terms of each arithmetic sequence.

1. 5, 8, 11, …

2. −4, −6, −8, …

3. 100, 93, 86, …

4. −24, −19, −14, …

5. $\frac{7}{2}$, 6, $\frac{17}{2}$, 11, …

6. 4.8, 4.1, 3.4, …

Find the first five terms of each arithmetic sequence described.

7. $a_1 = 7, d = 7$

8. $a_1 = -8, d = 2$

9. $a_1 = -12, d = -4$

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

11. $a_1 = -\frac{5}{6}, d = -\frac{1}{3}$

12. $a_1 = 10.2, d = -5.8$

Find the indicated term of each arithmetic sequence.

13. $a_1 = 5, d = 3, n = 10$

14. $a_1 = 9, d = 3, n = 29$

15. a_{18} for −6, −7, −8, ….

16. a_{37} for 124, 119, 114, ….

17. $a_1 = \frac{9}{5}, d = -\frac{3}{5}, n = 10$

18. $a_1 = 14.25, d = 0.15, n = 31$

Complete the statement for each arithmetic sequence.

19. 166 is the __?__th term of 30, 34, 38, …

20. 2 is the __?__th term of $\frac{3}{5}$, $\frac{4}{5}$, 1, …

Write an equation for the *n*th term of each arithmetic sequence.

21. −5, −3, −1, 1, …

22. −8, −11, −14, −17, …

23. 1, −1, −3, −5, …

24. −5, 3, 11, 19, …

Find the arithmetic means in each sequence.

25. −5, __?__, __?__, __?__, 11

26. 82, __?__, __?__, __?__, 18

27. EDUCATION Trevor Koba has opened an English Language School in Isehara, Japan. He began with 26 students. If he enrolls 3 new students each week, in how many weeks will he have 101 students?

28. SALARIES Yolanda interviewed for a job that promised her a starting salary of $32,000 with a $1250 raise at the end of each year. What will her salary be during her sixth year if she accepts the job?