

4.6**Practice A**

In Exercises 1 and 2, write the next three terms of the arithmetic sequence.

1. First term: 3
Common difference: 11
2. First term: 15
Common difference: -4

In Exercises 3–6, find the common difference of the arithmetic sequence.

3. 9, 15, 21, 27, ...
4. 240, 210, 180, 150, ...
5. $-15, -10, -5, 0, \dots$
6. $2, 2\frac{1}{4}, 2\frac{1}{2}, 2\frac{3}{4}, \dots$

In Exercises 7 and 8, graph the arithmetic sequence.

7. 3, 10, 17, 24, ...
8. $-2, -6, -10, -14, \dots$

In Exercises 9 and 10, determine whether the sequence is arithmetic. If so, find the common difference.

9. 12, 17, 21, 26, ...
10. $-10, -3, 4, 11, \dots$

In Exercises 11–14, write an equation for the n th term of the arithmetic sequence. Then find a_{10} .

11. $-3, -1, 1, 3, \dots$
12. $2, -3, -8, -13, \dots$
13. $4\frac{1}{2}, 6, 7\frac{1}{2}, 9, \dots$
14. $\frac{2}{5}, \frac{4}{5}, \frac{6}{5}, \frac{8}{5}, \dots$

15. The first term of an arithmetic sequence is 6. The common difference of the sequence is two-thirds the first term. Write the next three terms of the sequence.
16. The height (in feet) of the water in a tank each hour after opening its drain can be estimated by the sequence in the table.

Hours after opening drain	1	2	3	4
Height (feet)	18	15	12	9

- a. Write a function that represents the arithmetic sequence.
- b. Find and interpret the seventh term.
- c. Would the eighth term apply in this situation?