

Determine the common difference or ratio and find the next 4 terms of each sequence.

1. 7, 18, 29, ...

2. 12, 6, 3, ...

Find the indicated term for the following sequence

3. $a_1 = 6$, $a_n = a_{n-1} + 4$; a_5

4. $a_n = 1.25(3)^{n-1}$; a_{14}

5. $a_n = 2/3n + 9$; a_{27}

Write an explicit (closed) rule and a recursive rule for the following sequences:

6. 11, 4, -3, -10, ...

7. 4, 20, 100, 500, ...

8. 120, 96, 76.8, 61.44, ...

Find the indicated item

9. If $a_{13} = 78$ and $d = 4$, find a_1

11. If $a_1 = 12$, $r = 1.5$, and $a_n = 91.125$, find n

10. If $a_n = 52$, $d = 5$, and $a_1 = -8$, find n

12. If $a_1 = 25$ and $a_7 = 1.1664$, find r