

Recursive Formula

For each arithmetic sequence, find the common difference. Use the recursive formula to find the next three terms in the sequence. Show your work.

1) $-8, 12, 32, 52, \dots$

2) $-40, -30, -20, -10, \dots$

3) $-19, -15, -11, -7, \dots$

4) $20, 15, 10, 5, \dots$

5) $-4, 5, 14, 23, \dots$

6) $20, 40, 60, 80, \dots$

For each geometric sequence, find the common ratio. Use the recursive formula to find the next three terms in the sequence. Show your work.

7) 1, 4, 16, 64, ...

8) 4, -20, 100, -500, ...

9) 4, 8, 16, 32, ...

10) 2, -8, 32, -128, ...

11) 1, 3, 9, 27, ...

12) 1, -5, 25, -125, ...