

Review sequences and series

Date _____ Period _____

For each sequence, state if it is arithmetic, geometric, or neither.

1) $-4, 20, -100, 500, -2500, \dots$

2) $-29, -9, 11, 31, 51, \dots$

3) $1, 2, 6, 24, 120, \dots$

4) $23, 26, 29, 32, 35, \dots$

5) $-1, 5, -25, 125, -625, \dots$

6) $4, -24, 144, -864, 5184, \dots$

7) $2, 4, 12, 48, 240, \dots$

8) $-2, -10, -50, -250, -1250, \dots$

9) $20, 220, 420, 620, 820, \dots$

10) $-31, -25, -19, -13, -7, \dots$

Evaluate each arithmetic series described.

11) $(-19) + (-25) + (-31) + (-37) \dots, n = 8$

12) $9 + 14 + 19 + 24 \dots, n = 14$

13) $16 + 19 + 22 + 25 \dots, n = 20$

14) $21 + 27 + 33 + 39 \dots, n = 14$

15) $14 + 17 + 20 + 23 \dots, n = 10$

16) $22 + 30 + 38 + 46 \dots, n = 18$

Evaluate each geometric series described.

17) $-2 + 12 - 72 + 432 \dots, n = 8$

18) $-1 - 6 - 36 - 216 \dots, n = 8$

19) $-2 - 6 - 18 - 54 \dots, n = 9$

20) $3 - 6 + 12 - 24 \dots, n = 8$

21) $1 + 4 + 16 + 64 \dots, n = 6$

22) $-4 - 16 - 64 - 256 \dots, n = 7$