

Q3HW2 - All work on looseleaf.

Date_____ Period_____

Determine if the sequence is geometric. If it is, find the common ratio and the 8th term.

1) 3, -18, 108, -648, ...

2) 0.8, 4, 20, 100, ...

3) $-5, -\frac{15}{4}, -3, -\frac{5}{2}, \dots$

4) 1, 2, 6, 24, ...

5) $8, \frac{16}{3}, 4, \frac{16}{5}, \dots$

6) 2, 10, 50, 250, ...

7) 95, 952, 9522, 95222, ...

8) -2, 12, -72, 432, ...

9) -4, 12, -36, 108, ...

10) 2, -4, 8, -16, ...

11) 4, -8, 16, -32, ...

12) 3, 6, 12, 24, ...

Determine if the sequence is geometric. If it is, find the common ratio and the indicated term.

13) 4, -12, 36, -108, ...

Find a_{10}

14) -3, -9, -27, -81, ...

Find a_{12} **For each sequence, state if it is arithmetic, geometric, or neither.**

15) -8, -6, -3, 1, 6, ...

16) $3, \frac{5}{4}, \frac{7}{9}, \frac{9}{16}, \frac{11}{25}, \dots$

17) 4, 16, 36, 64, 100, ...

18) $26, 14, 8, 5, \frac{7}{2}, \dots$