Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_

Identify which of the following [sequences](https://www.ck12.org/analysis/Sequences) are arithmetic, geometric or neither.

1. 2, 4, 6 8,…
2. 1/2, 3/2, 9/2, 27/2,…
3. 1, 2, 4, 7,…
4. 24, −16, 32/3, −64/9,…
5. 10, 5, 0, −5,…
6. 3, 4 ,7, 11,…

Given the first term and common ratio, write the nth term rule and use the calculator to generate the first five terms in each sequence.

1. =32 and r=32
2. a1=−81 and r=−13
3. a1=7 and r=2
4. a1=8125 and r=−52

Find the nth term rule for each of the following geometric [sequences](https://www.ck12.org/analysis/Sequences).

1. 162,108,72,…
2. −625,−375,−225,…
3. 3,15,75,…
4. 5,10,20,…