HW 2 – GEOMETRIC SEQUENCES NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Determine if the following are Arithmetic (A), Geometric (G), or neither (N). If it is Arithmetic or Geometric, find the recursive and explicit formulas.*

1. $-9, -2, 5, 12, 19$ 2. $5, 25, 125, 625$

3. $\frac{1}{4}, \frac{2}{5}, \frac{3}{6}, \frac{4}{7}$ 4. $-3, 18, -54, …$

5. Find the 7th term of the sequence 6. State the 10th term of the sequence

 $-1, 5, -25…$ $\frac{5}{128}, \frac{5}{64}, \frac{5}{32}, …$

7. Complete the sequence: 8. Complete the sequence:

 4, \_\_\_, \_\_\_, \_\_\_, \_\_\_, 128 $\frac{1}{25}$ , \_\_\_ , \_\_\_ , \_\_\_ , 25

9. The 3rd term of a geometric progression is 432 10. If $a\_{2}=12 and a\_{5}=-324, find a\_{11}$.

 And the 5th term is 243. Find the 8th term.

11. How many terms are in the sequence: 12. Which term is 729 in the sequence:

 $11250, 2250, 450,…18 $ $\frac{1}{27} , \frac{1}{9} , \frac{1}{3} , …$