AFM HW 4 – GEOMETRIC SEQUENCES NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Determine whether each sequence is arithmetic, geometric, or neither. If it is arithmetic then state the common difference, if it is geometric then state the common ratio.*

1. 2. 3.

4. 5. 6.

7. 8. 9.

*Solve each of the following geometric sequences.*

10. In a geometric sequence, the first term is 2 and the common ratio is

11. Find the common ratio and the next two terms for the geometric sequence

12. Find the 12th term of the geometric sequence

13. In a geometric progression, the first term is 125 and the common ratio is Find the 8th term.

14. Write the first 4 terms of the geometric sequence whose 5th term is 6 and whose common ratio is

15. Find the first term in a geometric progression whose common ratio is 2 and whose 6th term is 96.

16. The 3rd term of a geometric progression is 54 and the 6th term is . What are the first two terms?

17. The 3rd term of a geometric progression is 12 and the 5th term is 48. Find the first two terms.

18. Which term is in the geometric progression 64, 32, 16, … ?

19. Which term is in the geometric progression 3125, 625, 125, … ?