Algebra I Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Arithmetic and Geometric Sequences Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour\_\_\_\_\_\_\_

Quiz Review

**SHOW YOUR WORK!**

1. Find the common difference and the next two terms of the sequence.
2. -4, 3, 10, 17, ... d = \_\_\_\_\_\_ Next two terms \_\_\_\_\_\_\_ and \_\_\_\_\_
3. b) 10, 1, -8, -17, … d = \_\_\_\_\_\_ Next two terms \_\_\_\_\_\_\_ and \_\_\_\_\_
4. Find the common ratio and the 7th term of the sequence.

 a) $\frac{1}{49}$, $\frac{1}{7}$, 1, 7, 49 … r = \_\_\_\_\_\_\_\_\_\_\_

 7th term= \_\_\_\_\_\_\_\_

1. 16, 4, 1, $\frac{1}{4}$, $\frac{1}{16}$ … r = \_\_\_\_\_\_\_\_\_\_

 7th term = \_\_\_\_\_\_\_

1. Find the common ratio of the sequence and the next two terms.
2. 3, -15, 75, -375… r = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Next two terms \_\_\_\_\_\_\_ and \_\_\_\_\_\_

1. 4, 40, 400, …

 r = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Next two terms \_\_\_\_\_\_\_ and \_\_\_\_\_\_

Determine if the following sequences are arithmetic, geometric, or neither.

If it is arithmetic or geometric **give the common ratio or common difference**.

Show your work and **circle your answer**.



1. 13, 26, 39, 52...



1. 36, 4, $\frac{4}{9}$, $\frac{4}{81}$, $\frac{4}{729}$ …
2. 3, -1, 2, 1, 3…

Write the recursive and explicit formula for the following sequences.

**\*\*\*(YOU NEED TO MEMORIZE THESE FOR YOUR QUIZ! STUDY YOUR NOTES)\*\*\***

1. 18, 15, 12, 9, 6 8) 80, 20, 5, 1.25





1. 97, 104, 111, 118 10) $\frac{1}{36}$, $-\frac{1}{6}$ , 1, -6, 36

