Algebra 1: 4.2 Homework - Part 2 **Name _____ Period _____**
Geometric Sequences

Find the common ratio for each geometric sequence.

1) 5, 10, 20, 40, …

r = _____

2) 45, 15, 5, $\frac{5}{3}$, …

r = _____

3) 0.2, -1, 5, -25, …

r = _____

4) 64, -32, 16, -8, …

r = _____

Find the common ratio. Then, multiply the common ratio to get the next 3 terms for each geometric sequence.

5) 3, 9, 27, 81, _____, _____, _____, …

r = _____

6) 5, -10, 20, -40, _____, _____, _____, …

r = _____

7) 156.25, 31.25, 6.25, 1.25, _____, _____, _____, …

r = _____

8) 0.1, 0.4, 1.6, 6.4, _____, _____, _____, …

r = _____

Determine whether the given sequence is arithmetic, geometric, or neither. For arithmetic or geometric sequences, determine the next 3 terms.

9) 4, 8, 12, 16,

_____, _____, _____, …

10) 1.1, 1.12, 1.123, 1.1234,

_____, _____, _____, …

11) 5, -20, 80, -320,

_____, _____, _____, …

12) 2, 4, 7, 11,

_____, _____, _____, …