

Draw the next figure in each pattern. Describe the pattern. Then, write the number sequence for the first 4 figures in the pattern.



Pattern: _____

Sequence: _____, _____, _____, _____



Pattern: _____

Sequence: _____, _____, _____, _____

Find the common difference for each arithmetic sequence. Then, find the next 3 terms.

3) 6, 4, 2, 0, _____

$d =$ _____

4) $\frac{1}{3}, \frac{2}{3}, 1, \frac{4}{3},$ _____

$d =$ _____

Find the common ratio for each geometric sequence. Then, find the next 3 terms.

5) 3000, 300, 30, 3, _____

$r =$ _____

6) 7, -21, 63, -189, _____

$r =$ _____

Determine whether each sequence is arithmetic (A), geometric (G), or neither (N). Then, write the next 3 terms.

7) -101, -112, -123, -134, _____ 8) 2, -2, 2, -2, _____

9) 1, -4, 9, -16, _____ 10) 1, 12, 123, 1234, _____