

Patterns Activity

Name _____

Goal: To identify, extend, and communicate clearly about numerical and geometric patterns

Look for a pattern in the following numerical sequences. Fill in the blanks, and briefly (and clearly!) explain the pattern or rule you used to complete the pattern.

1. 1, 5, 9, 13, _____, _____, _____

Explanation:

P.S. Is this sequence arithmetic, geometric, or neither of these? _____

2. 200, 100, 50, 25, _____, _____, _____

Explanation:

P.S. Is this sequence arithmetic, geometric, or neither of these? _____

3. 81, 100, 121, 144, _____, _____, _____

Explanation:

4. 1, 8, 27, 64, _____, _____, _____

Explanation:

P.S. Is this sequence arithmetic, geometric, or neither of these? _____

5. 3, 5, 8, 12, _____, _____, _____

Explanation:

6. 5, 10, 20, 40, _____, _____, _____

Explanation:

P.S. Is this sequence arithmetic, geometric, or neither of these? _____

7. 1, 1, 2, 3, 5, 8, 13, _____, _____, _____

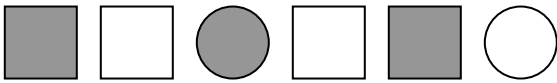
Explanation:

P.S. This sequence is known as “the Fibonacci Sequence”.

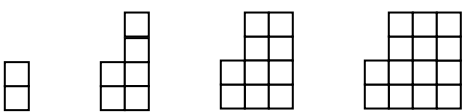
8. 3, 4, 3, 4, 5, 3, 4, 5, _____, _____, _____, _____, 6, 7

Explanation:

Look for a pattern in the following geometric sequences. Fill in the blanks, and briefly explain the pattern or rule you used to complete the pattern.

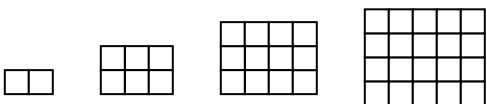
9.  _____, _____, _____

Explanation:

10.  _____, _____, _____

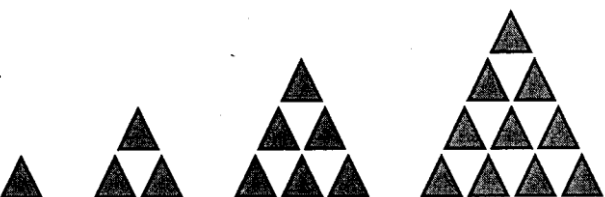
Explanation:

P.S. Is this sequence arithmetic, geometric, or neither of these? _____


11.  _____, _____, _____

Explanation:

P.S. Is this sequence arithmetic, geometric, or neither of these? _____

12.  _____, _____

Explanation:

13.  _____, _____

Explanation:

*14. Complete the following letter sequence: O, T, T, F, F, S, S, _____, _____, _____, _____, _____