Explicit Formulas – <mark>***most commonly used***</mark>
- Used to find any term in either type of sequence
- Need to know a_1, d (common difference for arithmetic) or r (common ratio for geometric)
- Arithmetic Formula:
  - $\boldsymbol{a_n = a_1 + d(n-1)}$
- Geometric Formula:
  - $\boldsymbol{a_n = a_1(r)^{n-1}}$

Recursive Formulas
- Allows you to find the nth term in a sequence if you know the value of the $(n-1)^{th}$ term of the sequence
- Need to know a_1, a_{n-1}, d (common difference for arithmetic) or r (common ratio for geometric)
- Arithmetic Formula:
  - $\boldsymbol{a_n = a_{n-1} + d}$
- Geometric Formula:
  - $\boldsymbol{a_n = (r)a_{n-1}}$

Practice (Arithmetic Sequences): Write the recursive rule for each sequence.
1. 7, 13, 19, 25, …

2. 30, 26, 22, 18, …

3. -5, -8, -11, -14, …

4. -2, 0, 2, 4, …

5. 8, 6, 4, 2, …

Practice (Geometric Sequences): Write the recursive rule for each sequence.

6. 3, 9, 27, ...

7. 1, 5, 25, ...

8. 6, -12, 24, ...

9. 5, -15, 45, -135, ...

10. 729, -243, 81, ...