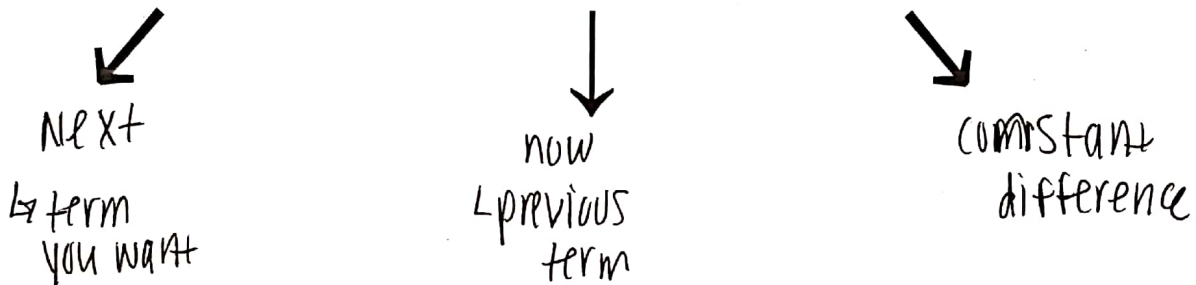


Recursive Formula for Arithmetic Sequences

Arithmetic Sequences represent linear functions.

Recursive formulas can tell us the next term if we know the previous. It shows us the pattern.

$$f(n) = f(n - 1) + d$$



Examples: Write the recursive formula for the following sequences

1. 6, 11, 16, 21...

$$f(n) = f(n-1) + 5 \quad f(1) = 6$$

2. 8, 5, 2, -1

$$f(n) = f(n-1) - 3 \quad f(1) = 8$$

3. 1.5, 2, 2.5, 3...

$$f(n) = f(n-1) + .5 \quad f(1) = 1.5$$

4. 8, 24, 40, 56...

$$f(n) = f(n-1) + 16 \quad f(1) = 8$$

*Remember you need to write your starting term with recursive functions!