

# Linear Functions

x	f(x)
0	1
1	3
2	5
3	7
4	9

Common difference  
+2  
rate of change  
slope

explicit  $\rightarrow f(x) = \text{common difference}(x) \pm \text{zero term}$

\* Recursive uses the previous  $f(x)$  value to get the current  $f(x)$  value

$$f(x-1) \pm \text{common difference}$$

$$f(x-1) + 2$$

$$f(6-1) + 2$$

$$\underbrace{f(5) + 2}$$

$$11 + 2$$

$$13$$

$$f(7-1) + 2$$

$$\underbrace{f(6) + 2}$$

$$13 + 2$$

$$15$$

$$f(7) = 15$$