

Linear

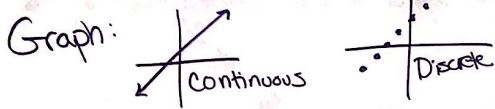


Table: Adding/Subtracting

x	0	1	2	3
f(x)	5	7	9	11

↗ +2

Equation: The x is on the ground.

Explicit: $y = 2x + 4$ (Increasing)

Continuous: $y = \frac{1}{2}(x-3) + 2$

Decreasing: $y = -2x + 4$

Decreasing: $y = -\frac{1}{2}(x-3) + 2$

Recursive: $f(0) = 5$ (Increasing)

Discrete: $f(n) = f(n-1) + 2$

$f(0) = 5$ (Decreasing)

$f(n) = f(n-1) - 2$

Exponential



Table: Multiply/Divide (x by a fraction)

x	0	1	2	3
f(x)	4	8	16	32

↗ · 2

Equation: T x is flying.

Explicit: $y = 4(2)^x$ (Continuous)

Recursive: $f(0) = 4$ (Increasing)

Discrete: $f(n) = 2f(n-1)$

$f(0) = 4$ (Decreasing)

$f(n) = \frac{1}{2}f(n-1)$