*Helpful hints on Discrete vs. Continuous!*

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| --- | --- | --- |
|  | **Discrete** | **Continuous** |
| **Tables** |

|  |  |
| --- | --- |
| n | f(n) |
| 1 | 2 |
| 2 | 3 |
| 3 | 4 |
| 4 | 5 |

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|  |  |
| --- | --- |
| x | f(x) |
| 0 | 1 |
| 0.25 | 1.25 |
| 0.5 | 1.5 |
| 0.75 | 1.75 |

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| **Graphs** |  |  |
| **Equations** | Recursive: $a\_{1}=2, a\_{n}=a\_{n-1}+1$Explicit: $a\_{n}=n+1$ | $$f\left(x\right)=x+1$$ |
| **Context** | Change happens ALL AT ONCE | Change happens continuously |
| **Domain:**  | $$whole numbers$$$$natural numbers$$$$\left\{n\left|n is a whole number\right.\right\}$$$$\left\{n\left|n is a natural number\right.\right\}$$ | $$real number$$Can include decimalsOption: could be only positive numbers (such as time) $$\left\{x\left|x\right. is a real number\right\}$$ |