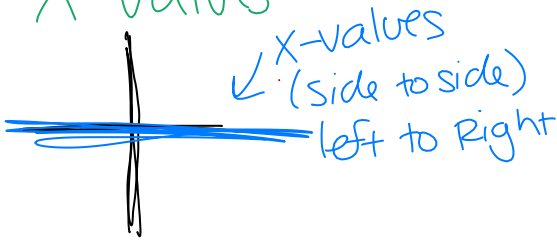


Domain

X-values



DIXI



Domain
Input (plug in)
X values
Independent

Range

Y-values



ROYD

Range
output (result)
Y values
Dependent

Domain

left to Right

$[-7, 10)$

Interval Notation



equal to
[]

not equal to
()

Range

$[-4, 6]$

bottom to top

Helpful hints on Discrete vs. Continuous!

	Discrete	Continuous																				
Tables	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>n</th> <th>f(n)</th> </tr> </thead> <tbody> <tr><td>1</td><td>2</td></tr> <tr><td>2</td><td>3</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>4</td><td>5</td></tr> </tbody> </table> <p style="text-align: center; margin-top: 10px;">whole #</p>	n	f(n)	1	2	2	3	3	4	4	5	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>x</th> <th>f(x)</th> </tr> </thead> <tbody> <tr><td>0</td><td>1</td></tr> <tr><td>0.25</td><td>1.25</td></tr> <tr><td>0.5</td><td>1.5</td></tr> <tr><td>0.75</td><td>1.75</td></tr> </tbody> </table> <p style="text-align: center; margin-top: 10px;">decimals</p>	x	f(x)	0	1	0.25	1.25	0.5	1.5	0.75	1.75
n	f(n)																					
1	2																					
2	3																					
3	4																					
4	5																					
x	f(x)																					
0	1																					
0.25	1.25																					
0.5	1.5																					
0.75	1.75																					
Graphs																						
Equations	<p>Recursive: $a_1 = 2, a_n = a_{n-1} + 1$</p> <p>Explicit: $a_n = n + 1$</p>	<p><u>$f(x) = x + 1$</u></p> <p style="color: blue; font-size: 1.5em;">sequences Function Notation</p>																				
Context	Change happens ALL AT ONCE	Change happens continuously																				
Domain:	<p><i>whole numbers</i></p> <p><i>natural numbers</i></p> <p>$\{n n \text{ is a whole number}\}$</p> <p>$\{n n \text{ is a natural number}\}$</p>	<p><i>real number</i></p> <p>Can include decimals</p> <p>Option: could be only positive numbers (such as time)</p> <p>$\{x x \text{ is a real number}\}$</p>																				