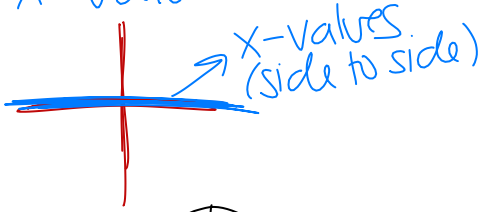


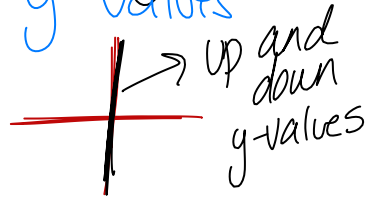
Domain

X-values



Range

y-values



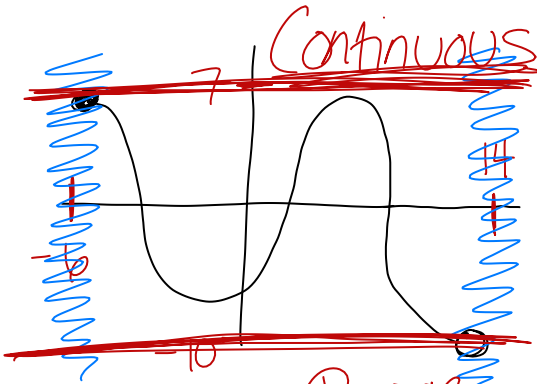
DIXI

Domain Input Independent
 X-values



ROYD

output Dependent
 Range y-values



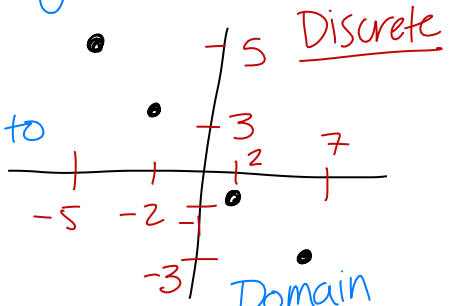
Domain
 $E(6, 14)$

Range
 $(-10, 7]$

Interval Notation

equal to
 $\geq \leq$
 $[]$

not equal to
 $> <$
 $()$



Domain

$\{-5, -2, 2, 7\}$

Range

$\{-3, -1, 3, 5\}$

set notation

*only for

Discrete

Helpful hints on Discrete vs. Continuous!

	Discrete	Continuous																				
Tables	<table border="1"> <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>whole #</p>	n	f(n)	1	2	2	3	3	4	4	5	<table border="1"> <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>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>sequences</u></p>	<p><u>$f(x) = x + 1$</u></p> <p><u>function Notation</u></p>																				
Context	Change happens ALL AT ONCE	Change happens continuously																				
Domain:	<p>whole numbers natural numbers</p> <p>$\{n n \text{ is a whole number}\}$</p> <p>$\{n n \text{ is a natural number}\}$</p>	<p>real number Can include decimals</p> <p>Option: could be only positive numbers (such as time)</p> <p>$\{x x \text{ is a real number}\}$</p>																				