

U9-4 Functions

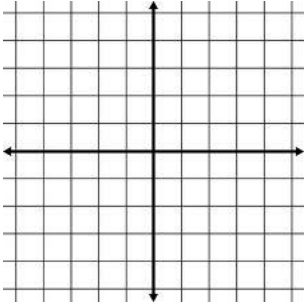
What we know already.....

	Definition	Example
Relation:		$\{(0,1), (1,3), (2,5), (2,7), (4,9)\}$
Domain:		
Range:		
Mapping:		

New Stuff.....

	Definition	Example
Function		

Functions can be represented as:

A set or ordered pairs	A table	A Mapping	A Graph
			

Function or not?	Yes/No	Explanation
1) $\{(0,1), (1,3), (2,5), (3,7), (4,9)\}$		
2) $\{(1,1), (1,3), (2,5), (4,7), (4,9)\}$		
3) $\{(0,1), (1,1), (2,1), (3,1), (4,1)\}$		

Vertical Line Test

(AKA: spaghetti test, pencil test):

Relation	Graph	Function?	Explain												
1) $\{(0,2), (1,3), (2,1), (3,5)\}$															
2) <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>1</td> </tr> <tr> <td>3</td> <td>2</td> </tr> <tr> <td>2</td> <td>3</td> </tr> <tr> <td>4</td> <td>4</td> </tr> <tr> <td>5</td> <td>5</td> </tr> </tbody> </table>	x	y	2	1	3	2	2	3	4	4	5	5			
x	y														
2	1														
3	2														
2	3														
4	4														
5	5														
3)															

