Linear vs Non-Linear Relationships
Graphs, Tables & Equations

Today's Learning Targets:

8.8 I can give examples of relationships that are non-linear functions.

Linear

Tables have a _____ pattern

Graphs make a _____ line
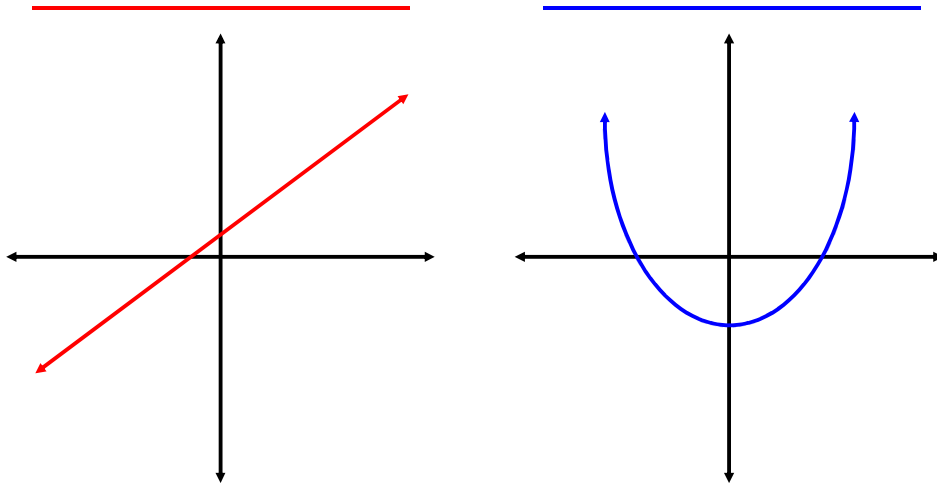
Equations are _____ and do not have _____.

Non-Linear

Tables do not have a _____ pattern

Graphs do not make _____ line

Equations are _____ and have _____.

GRAPHS

TABLES

Is each table linear or non-linear?

x	y
-2	5
-1	2
0	1
1	2
2	5

linear
or
non-linear

x	y
-3	9
0	0
1	1
2	4
3	9

linear
or
non-linear

x	y
1	4
2	1
3	-2
4	-5
5	-8

linear
or
non-linear

x	y
0	1
1	3
2	9
3	27
4	81

linear
or
non-linear

x	y
0	0
1	2
2	8
3	18
4	32

linear
or
non-linear

Linear Equations
$$y = mx + b$$

$y =$	_____ _____
$y =$	_____.
	When graphed, _____ _____
$y =$	_____.

Non-Linear Equations

$y =$	_____ _____
$y =$	_____.
$y =$	When graphed, _____
$y =$	_____ _____.

Write the equation for the linear table.

$y =$	x

$y =$	x

x	y
2	1
3	4
4	7
5	10
6	13

x	y
2	1
4	4
6	7
8	10
10	13