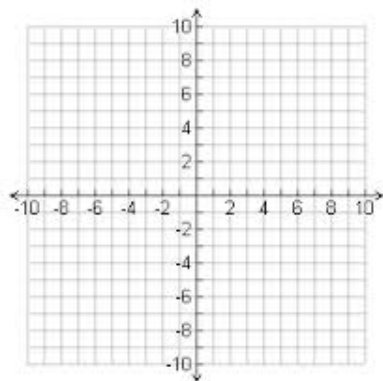
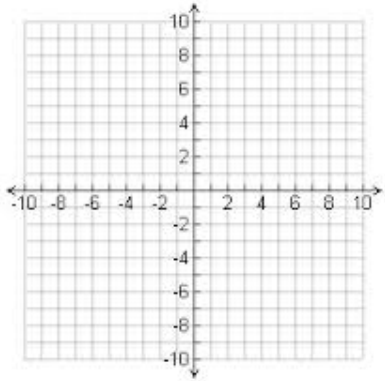
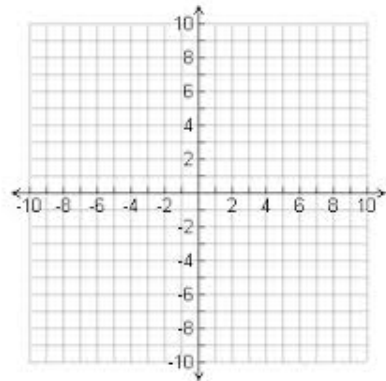


## Modeling with Linear, Exponential and Quadratic Functions

- A) Pair up with a partner and a device.  
 B) Go to [student.desmos.com](https://student.desmos.com). (Do not login with Google)  
 C) Sign in with BOTH your names. (e.g. Alex and Maria = AlexMaria)  
 D) Class Code: \_\_\_\_\_  
 E) There is no need to save your work online. You only need to record your results on the handout given to you.

### Slide 1: Card Sort

Linear	Exponential	Quadratic																														
Equation	Equation	Equation																														
<table><tr><td>x</td><td></td><td></td><td></td><td></td></tr><tr><td>y</td><td></td><td></td><td></td><td></td></tr></table>	x					y					<table><tr><td>x</td><td></td><td></td><td></td><td></td></tr><tr><td>y</td><td></td><td></td><td></td><td></td></tr></table>	x					y					<table><tr><td>x</td><td></td><td></td><td></td><td></td></tr><tr><td>y</td><td></td><td></td><td></td><td></td></tr></table>	x					y				
x																																
y																																
x																																
y																																
x																																
y																																
																																
Dot Pattern	Dot Pattern	Dot Pattern																														

### Slides 2-4: Pattern Justifications

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Slides 5-7: Equations from Tables

$M(h) =$  \_\_\_\_\_

h	M(h)
0	
1	10
2	15
3	20
4	25
5	
	1025

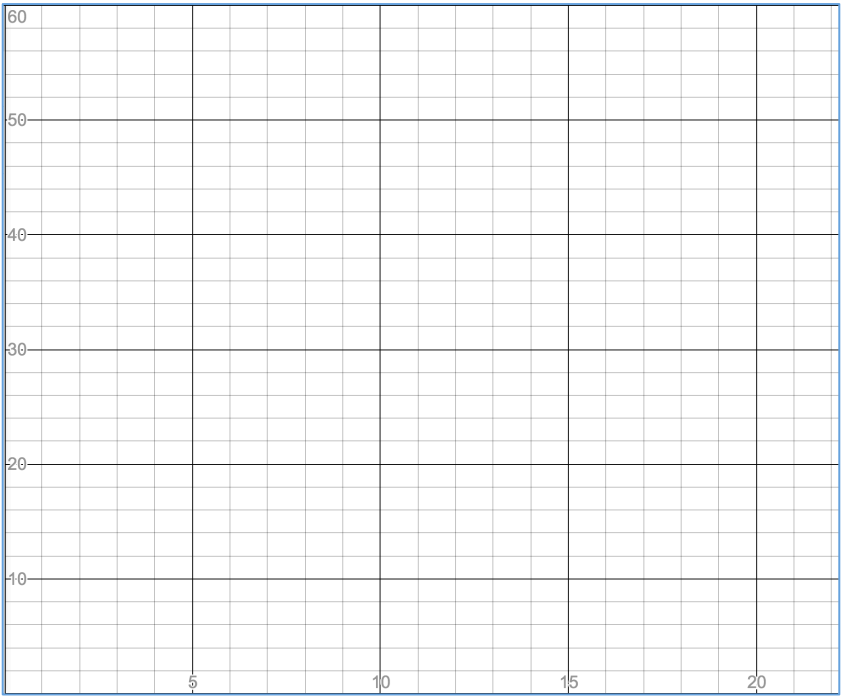
$D(n) =$  \_\_\_\_\_

n	D(n)
	160
0	
1	10
2	5
3	2.5
4	1.25
5	

$A(s) =$  \_\_\_\_\_

s	A(s)
0	
1	10
2	40
3	90
4	160
5	
	1440

Slides 8-10: Jackson & Kendall



When will Jackson and Kendall have the same amount? \_\_\_\_\_ months

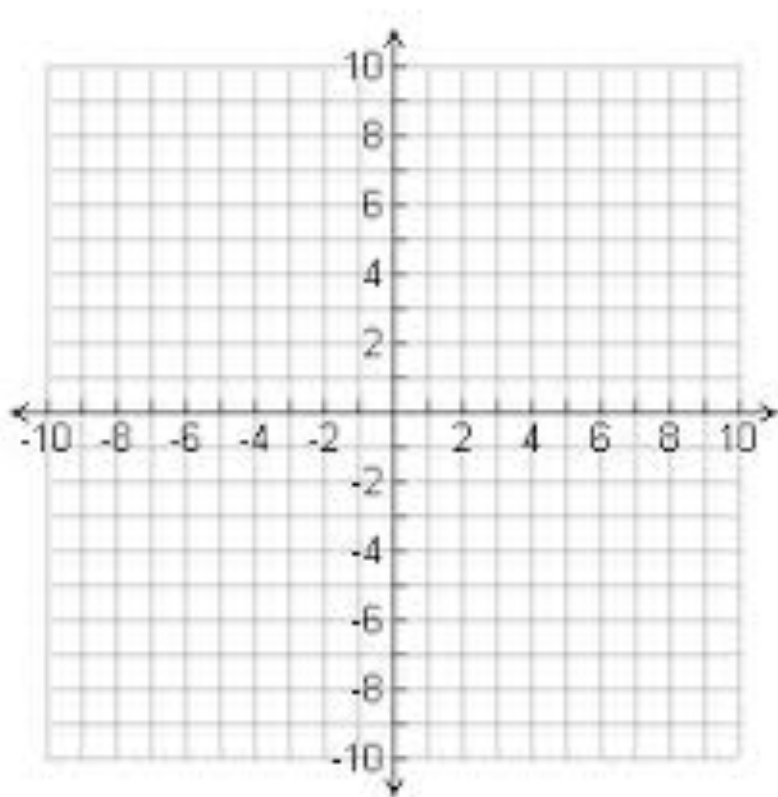
What will that amount be? \$ \_\_\_\_\_

When will Jackson have \$4 more than Kendall? \_\_\_\_\_ & \_\_\_\_\_ months

When will Kendall have \$4 more than Jackson? \_\_\_\_\_ months

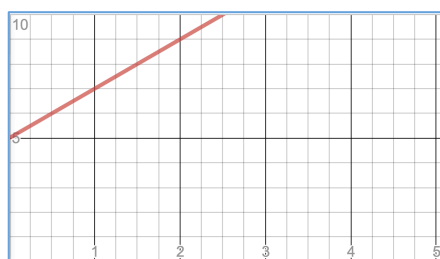
## Slide 11: Create a System

{ \_\_\_\_\_  
\_\_\_\_\_

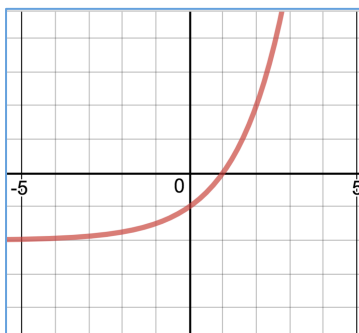


## Slides 12-17: Reading Values from a Graph

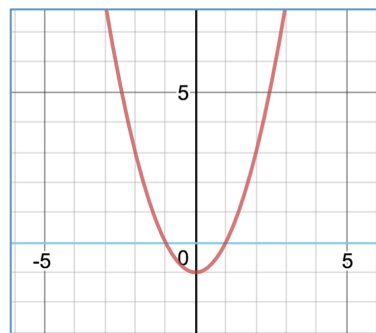
$L(5) =$  \_\_\_\_\_



$E(5) =$  \_\_\_\_\_



$x =$  \_\_\_\_\_ &  $x =$  \_\_\_\_\_



## Slides 18-19: Pairing the Range

$y = 2x - 3$                       Range = { \_\_\_\_\_ }

$y = 2^x - 3$                       Range = { \_\_\_\_\_ }

$y = -(x - 1)^2 - 3$               Range = { \_\_\_\_\_ }

Slides 20-21: Equations from Graphs

