

Determined differences in discrete and continuous functions

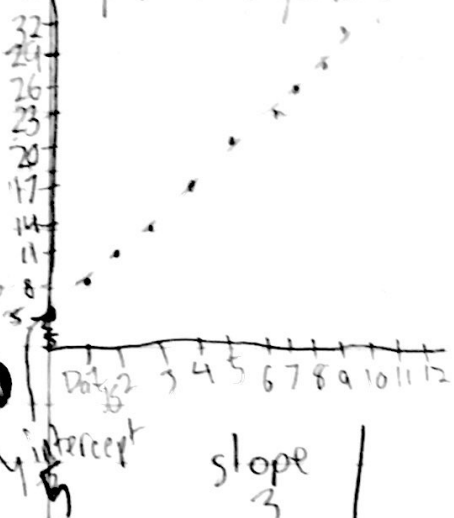
Wishful wednesday: The hoverboard, because it would be awesome

2.1 question 1:  
Graph Penny graph

table

x	f(x)
0	5
1	8
2	11
3	14
4	17
5	20

recursive equations:  $(f(x-1)) + 3$   
 explicit equations:  $f(x) = 3x + 5$



\* Continuous functions - have lines because they are all solutions of the equation, giving pennies nonstop always going  
discrete functions - No lines, just dots on the graph, are not continuous have breaks

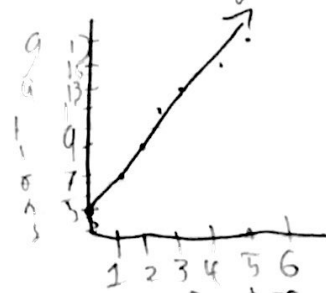
discrete  
 It only happens once a day, and he is not giving pennies all the time, can't give pennies on day 1.6

2.1 question 2  
 continuous because it is not interrupted

table

x	f(x)
0	5
1	7
2	9
3	11
4	13
5	15

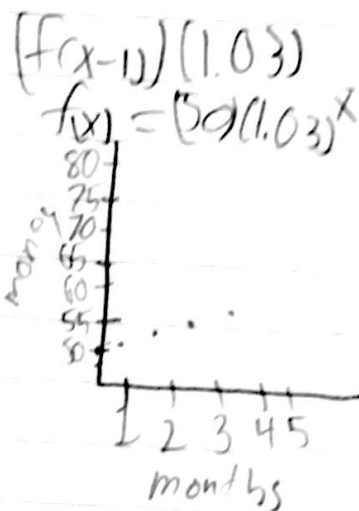
recursive equations:  $(f(x-1)) + 2$   
 explicit equations:  $f(x) = 2x + 5$



## 2.1 question 3

discrete, it is only at the end of the month that he gets his interest

x	f(x)
0	50
1	51.5
2	53.05
3	54.64
4	56.28



## 2.2 question 1

discrete

x	f(x)
0	0
1	8
2	16
3	24

$(f(x-1)) + 8$   
 $f(x) = 8x$



**domain**

covers all the x values that the graph touches or has the potential to touch

**Range**

covers all the y values that the graph touches or has the potential to touch

domain  $\rightarrow$  x value

interval notation

$[ ]$  if equal to

$( )$  if not equal to

$[0, \infty)$

Start of the domain  $\downarrow$  end of the domain

