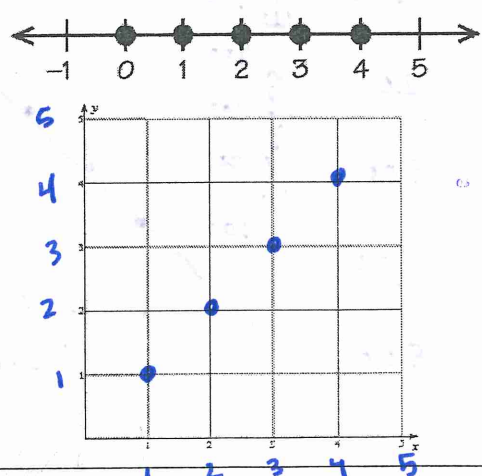
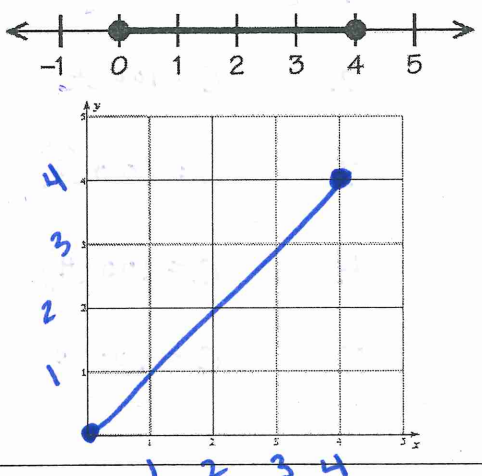


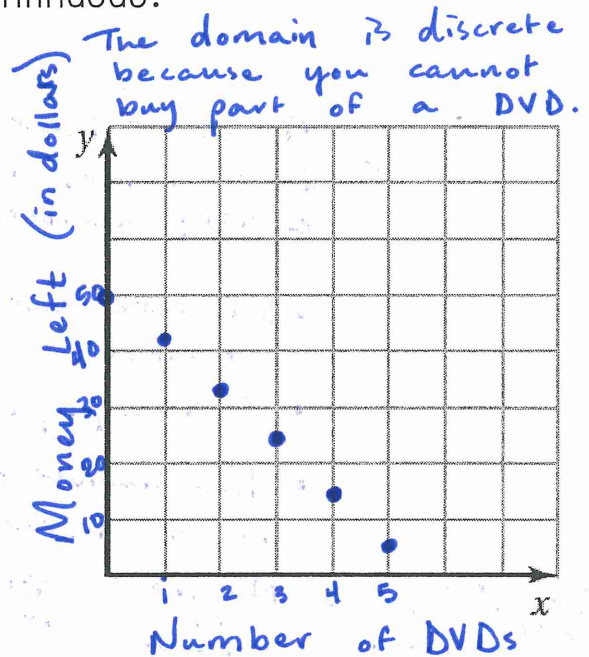
NOTES

	Discrete Domain	Continuous Domain																				
Definition	A set of input values that consists of <u>only certain</u> numbers in an interval	A set of input values that consists of <u>ALL</u> numbers in an interval																				
Words (examples)	<ul style="list-style-type: none"> Discrete data is counted 0, 1, 2, 3, 4... The number of books in a library 	<ul style="list-style-type: none"> Continuous data is measured All numbers from 0 to 4 Gallons of water in a puddle 																				
<p>Can you have .25 people? →</p> <p>Table (example)</p>	<table border="1"> <thead> <tr> <th>Number in Group</th> <th>Total Cost of Tickets (\$)</th> </tr> </thead> <tbody> <tr> <td>2</td> <td>15</td> </tr> <tr> <td>3</td> <td>22.50</td> </tr> <tr> <td>4</td> <td>30</td> </tr> <tr> <td>5</td> <td>37.50</td> </tr> </tbody> </table>	Number in Group	Total Cost of Tickets (\$)	2	15	3	22.50	4	30	5	37.50	<table border="1"> <thead> <tr> <th>Number of years</th> <th>Height of a tree (in feet)</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>1</td> </tr> <tr> <td>1</td> <td>3</td> </tr> <tr> <td>2</td> <td>5</td> </tr> <tr> <td>3</td> <td>7</td> </tr> </tbody> </table>	Number of years	Height of a tree (in feet)	0	1	1	3	2	5	3	7
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<p>Graphs</p> <p>Number Line</p> <p>Coordinate Plane</p>	<p>A discrete graph is a graph with <u>distinct isolated points</u></p> 	<p>A continuous graph is a graph</p> 																				

Example

The function $m = 50 - 9d$ represents the amount of money m (in dollars) you have after buying d DVDs. Graph the function. Is the domain discrete or continuous?

Number of DVDs (d)	Amount of money left (m)
0	$m = 50 - 9(0)$ 50
1	$m = 50 - 9(1)$ 41
2	$m = 50 - 9(2)$ 32
3	$m = 50 - 9(3)$ 23
4	$m = 50 - 9(4)$ 14
5	$m = 50 - 9(5)$ 5



The function $C = 100b$ represents the amount of calories C consumed by the number of bars eaten (b). Graph the function. Is the domain discrete or continuous?

Number of bars (b)	Calories (C)
0	$C = 100(0)$ 0
1	$C = 100(1)$ 100
2	$C = 100(2)$ 200
3	$C = 100(3)$ 300
4	$C = 100(4)$ 400
5	$C = 100(5)$ 500

