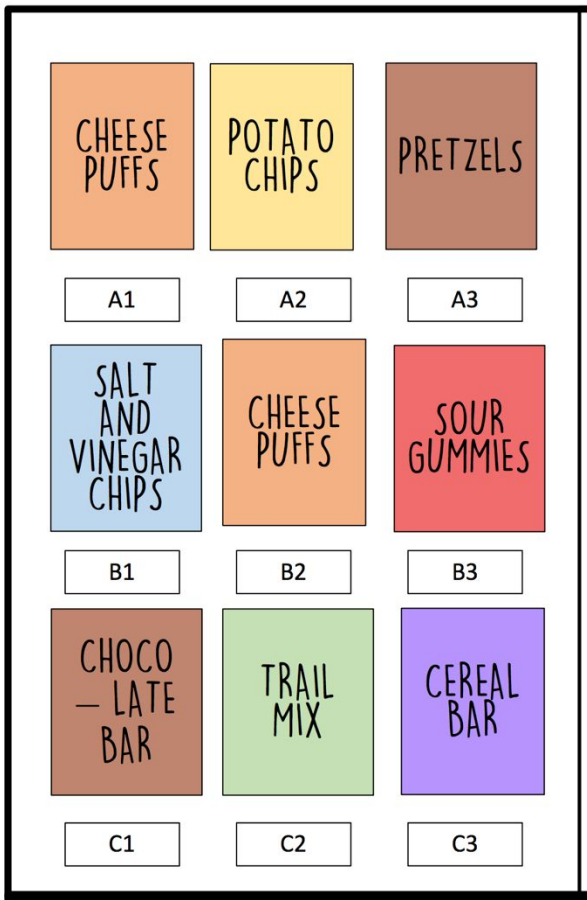


1. Compare the two schedules below. Which schedule is functioning properly? Why?

Cleveland High School 2018-2019	
1 st	Advanced Algebra 3-4
2 nd	HOTA
3 rd	CrossFit
4 th	Physics SL
Cleveland High School 2018-2019	
1 st	Advanced Algebra 3-4
2 nd	HOTA
2 nd	CrossFit
3 rd	Physics SL

2. Use the vending machine below to answer the following:



- a) If you push A3 what do you get?
- b) If you got sour gummies, what button did you push?
- c) If you push C2 and get trail mix is the vending machine functioning properly?
- d) If you push C2 again and get pretzels is the vending machine functioning properly? Why?
- e) If you input B2 and the machine outputs cheese puffs and a cereal bar is the vending machine functioning properly? Why?

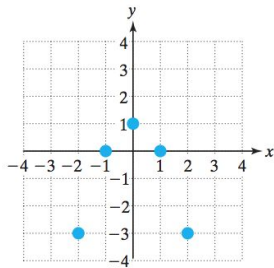
f) **Functions are relations in which a given input always results in only one output.** Explain what this formal definition means for the vending machine. Under what conditions would the vending machine be a function? Under what conditions would the vending machine not be a function?

3. Use the definition of a function from the previous page to decide if the following relationships are functions. Explain why or why not for each one.

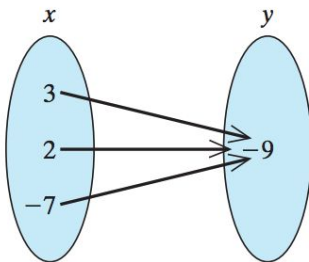
a)

Input	Output
1	3
2	6
3	9
4	12
5	15

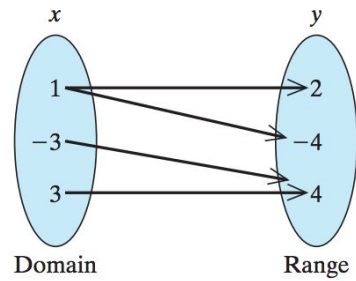
b)



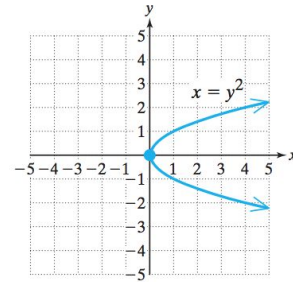
c)



d)



e)



f)

x	y
0	3
-2	$\frac{1}{2}$
5	10
-7	1
-2	8
5	1