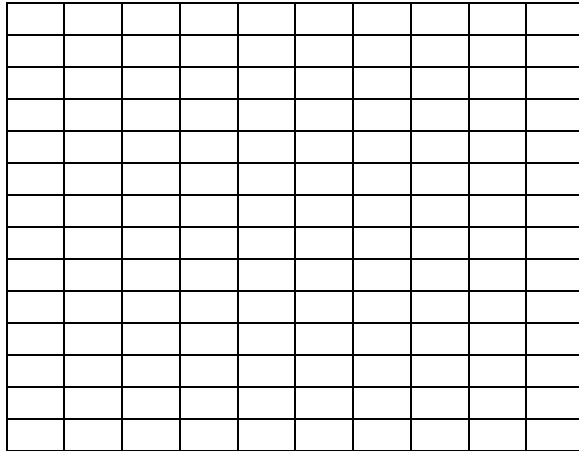


# Test review on Variables and Patterns

1. Sidney, Liz, and Malcolm thought it would be a good idea to get a souvenir T-shirt for each customer who went on the Ocean and History Bike Tour. Latisha found a company who would sell them shirts with their logo for \$8.50.

a. Make a table and a graph that show number of shirts and cost for up to 10 shirts.

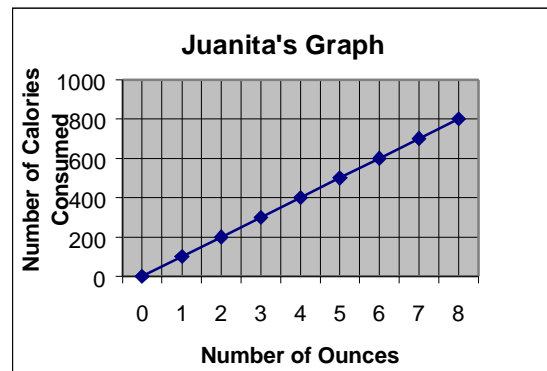
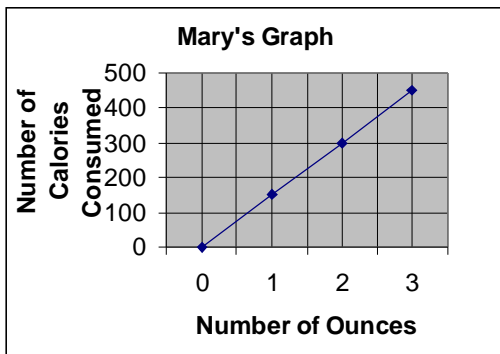
Shirts	Cost
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	



b. Would it make sense to connect the points on your graph with a line? Explain.

c. Write a rule using symbols and numbers to determine the T-shirt cost for any number of customers using  $C$  for cost and  $n$  for number of customers.

2. Mary and Juanita made the following graphs.



a. Did Mary and Juanita graph the same data set?

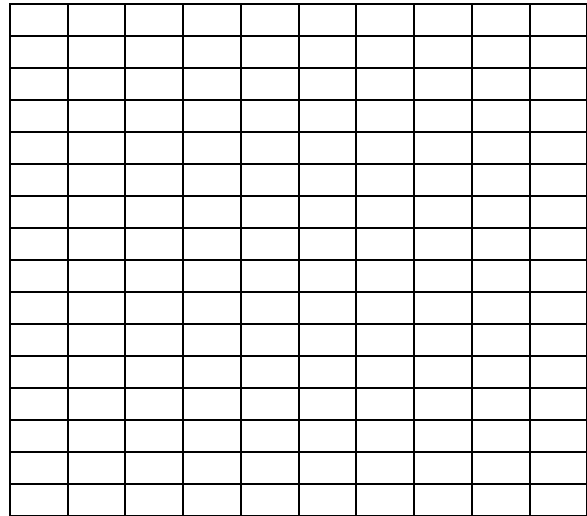
b. Write a rule relating the number of ounces to the calories consumed from Mary's graph

3. Dee bought a CD player with the money he earned working during his vacation. He checked CD costs at 2 stores.

- Bob's Department Store has a \$30 membership fee, then each CD costs \$8
- Bill's Warehouse sells CD's for \$12.50 each.

a. Make a table and a graph that shows the cost of purchasing 0-10 CDs at each store.

CDs	Bob's	Bill's
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		



**Give answers to b and c as a range (ex. 5 CD's or less).**

- b. How many CDs would Dee have to purchase to have Bill's Warehouse be the best place to buy CDs?
  
- c. How many CDs would Dee have to purchase to have Bob's Department Store be the best place to buy CDs?
  
- d. Explain what representation-the *narrative description*, the *table*, of the *graph*-helps you the most in making the decision of where to buy CDs.

4. Hiroshi gave  $y=12x+10$  as the answer to a question on his test paper. Make up a situation that his rule could represent.