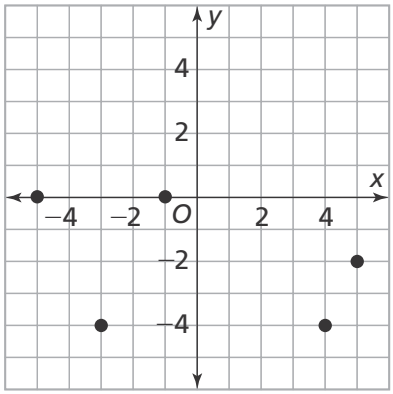
Name: _____

3-2 Additional Practice

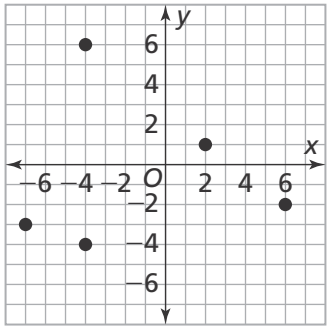
Scan for Multimedia

In 1 and 2, explain whether the graph represents a function.

1.



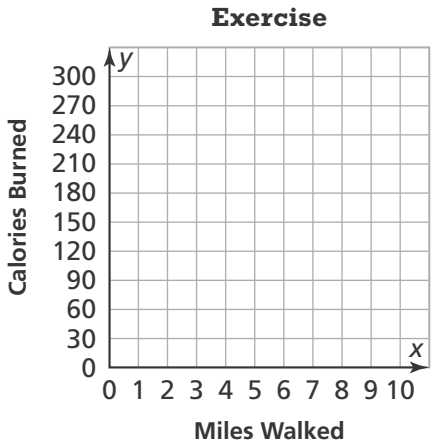
2.



3. Marcus records the total number of Calories burned after each mile he walks.

Miles Walked (x)	1	2	3
Calories Burned (y)	97	194	291

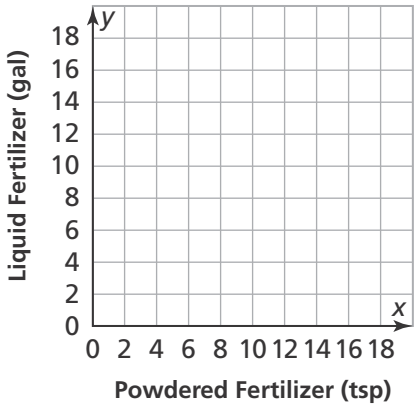
a. Graph the ordered pairs from the table.



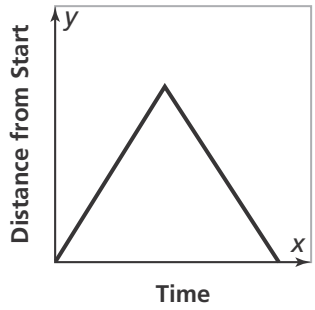
b. Is the relation a function? Explain.

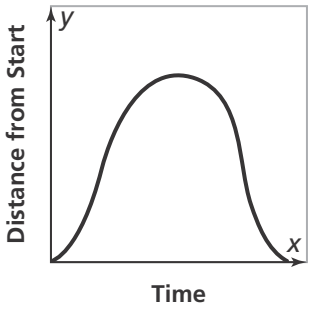
4. The relationship between the amount of powdered fertilizer, x, needed to make y gallons of liquid fertilizer is shown in the table. Is the relation a function? Use the graph to support your answer.

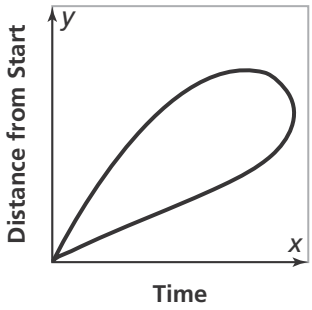
x	0	6	12	18
y	0	4	8	12



5. Robert swims a lap in the pool. His coach graphs his distance from the starting block. MP.3







a. Determine whether each graph is a function. Justify your answer.

b. Construct Arguments Which graph must be incorrect? Explain.

6. Higher Order Thinking Which of these tables represent a nonlinear function?

Table I

Input	3	6	9	12	15
Output	1	4	9	16	25

Table II

Input	2	4	6	8	10
Output	19	9	−1	−11	−21

Table III

Input	6	3	0	−3	−6
Output	216	27	0	−27	−216

Assessment Practice

7. Greta opens a savings account with $25. She saves $20 each week. The table represents her account balance.

Greta's Savings Account

Week	0	1	2	3	4	5
Money in Account	25	45	65	85	105	125

PART A

Write a function that relates the amount of money in Greta's account, m, to the number of weeks, w.

PART B

Is the relation a linear or a nonlinear function? Explain.