

Name:

Period:



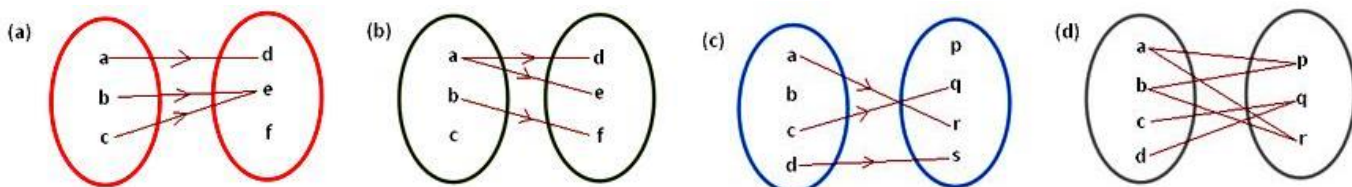
Unit 6 Practice Test

Calculators OK

Question 01

The rule for functions is each “x” value, input, or domain has _____ “y” value, output, or range.

Question 02 Circle each function below! There may be more than one!



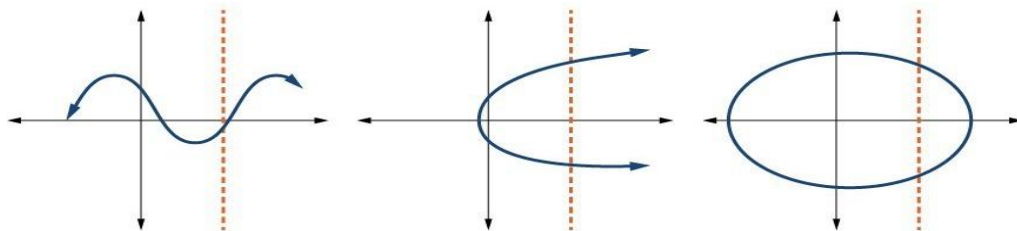
Question 03 Circle each function below! There may be more than one!

x	Y
-2	5
-1	6
0	7
1	8
2	9

x	y
0	2
1	4
2	6
3	8
1	0

x	y
-6	3
0	0
2	1
4	2
6	3

Question 04 Circle each function below! There may be more than one!



Question 05 Circle each linear function below! There may be more than one!

(a)

x	y
0	5
2	6
4	7
10	10

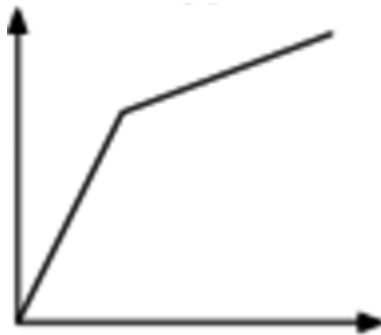
(b)

x	y
0	20
1	17
2	14
3	11

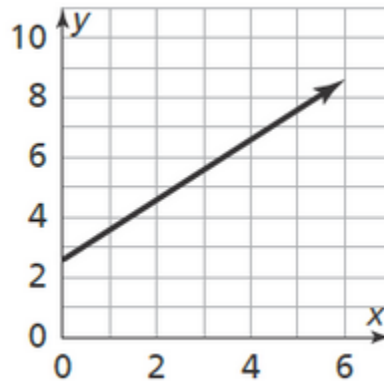
(c)

x	y
-2	3
0	4
2	5
8	6

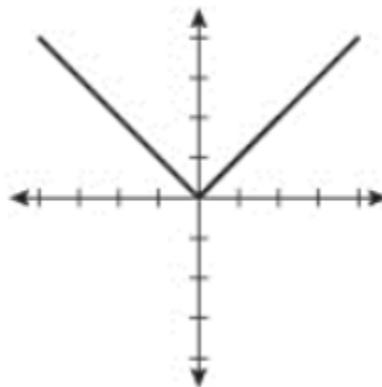
(d)



(e)



(f)



(g)

$$y = -\frac{1}{2}x + 1$$

(h)

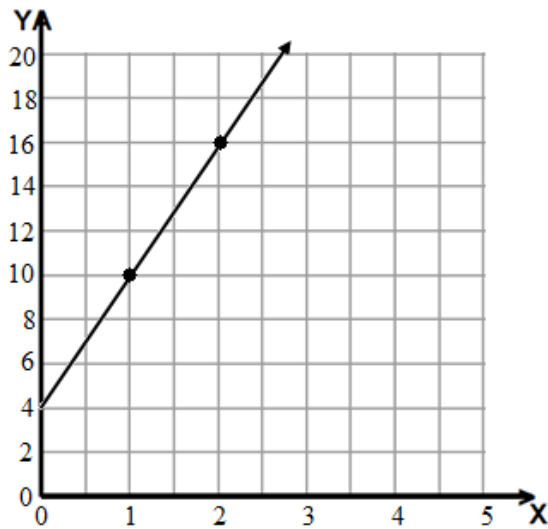
$$y = x^2$$

(i)

$$xy = 2$$

Question 06

Amazing Bowling!



Bananas for Bowling!

x	y
2	17
4	27
6	37

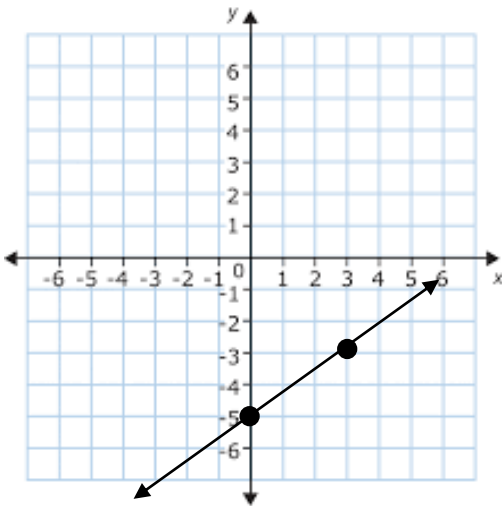
Each bowling venue charges an initial fee to rent shoes and then a constant fee for each game bowled. The graph and table above show the total cost in dollars (y) for the number of games bowled (x).

Select **all** true statements below.

- a) There is a linear relationship between games and cost for Amazing Bowling.
- b) There is a linear relationship between games and cost for Bananas for Bowling.
- c) The shoe rental fee at Amazing Bowling is \$4.
- d) Each game at Amazing Bowling costs \$10.
- e) Each game at Bananas for Bowling costs \$5.
- f) The shoe rental fee at Bananas for Bowling is \$_____.

Question 07

Linear Function M



Linear Function P

x	y
-2	-3
2	-1
6	1
14	5

Select all true statements below.

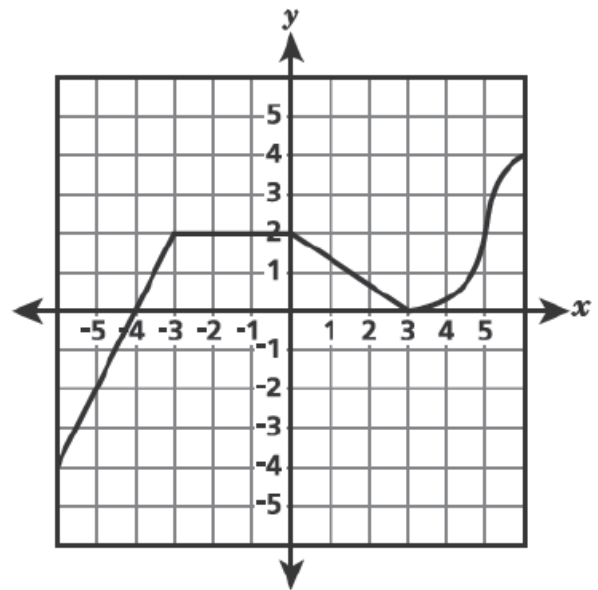
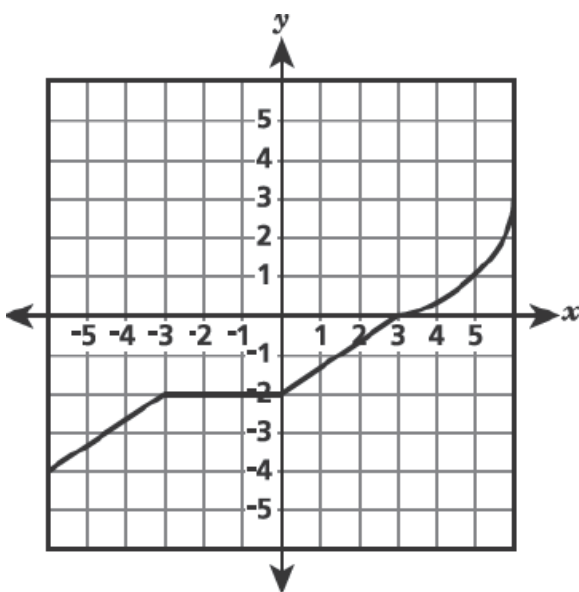
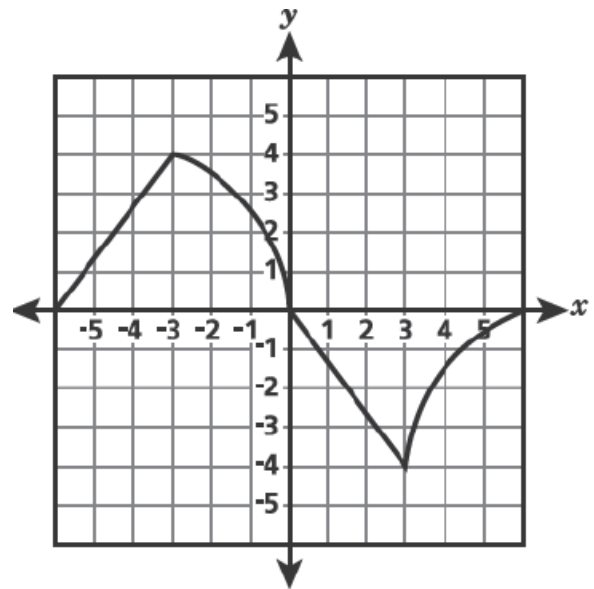
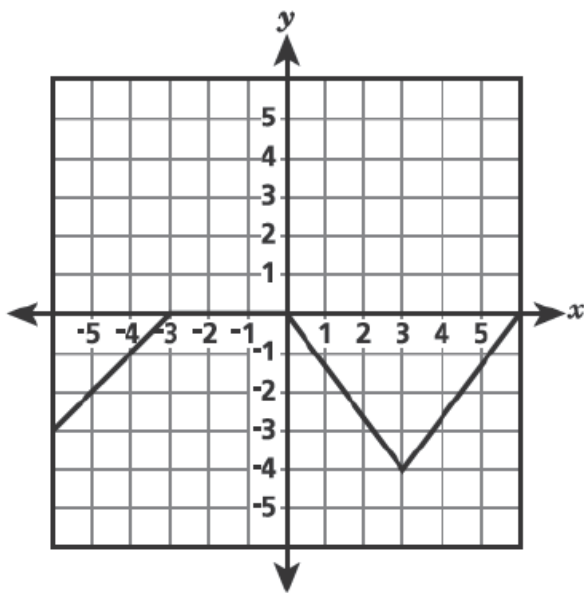
- a) Function M has a positive rate of change.
- b) Function P has a positive rate of change.
- c) Function M has a positive initial value.
- d) Function P has a positive initial value.
- e) Function M has a greater rate of change than Function P.
- f) Function P has a greater rate of change than Function M.
- g) Function M has a greater initial value than Function P.
- h) Function P has a greater initial value than Function M.

Question 08

A function has the following properties:

- It is increasing and linear when the value of x is between -5 and -3 .
- It remains constant when the value of x is between -3 and 0 .
- It is decreasing and linear when the value of x is between 0 and 3 .
- It is increasing and nonlinear when the value of x is between 3 and 5 .

Which graph **best** represents this function?

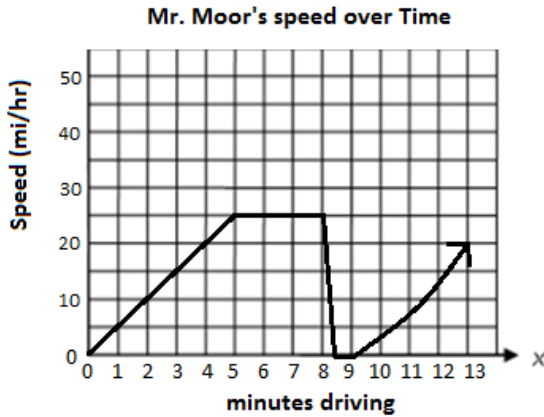


Question 09

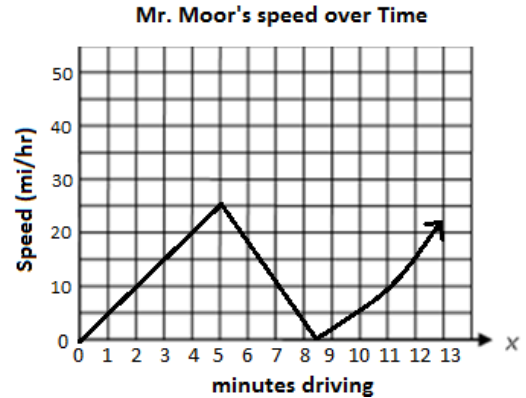
Mr. Moor is driving to work. Select the graph below the models his trip!

- He increases his speed the first 5 minutes
- He goes the same speed for the next 3 minutes
- He then makes a quick stop for a squirrel
- He increases his speed for the rest of the drive

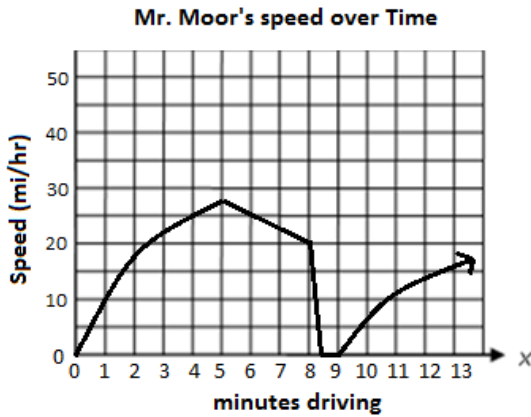
a.



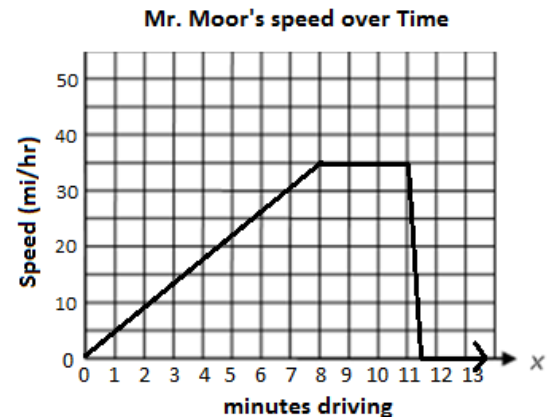
b.



c.

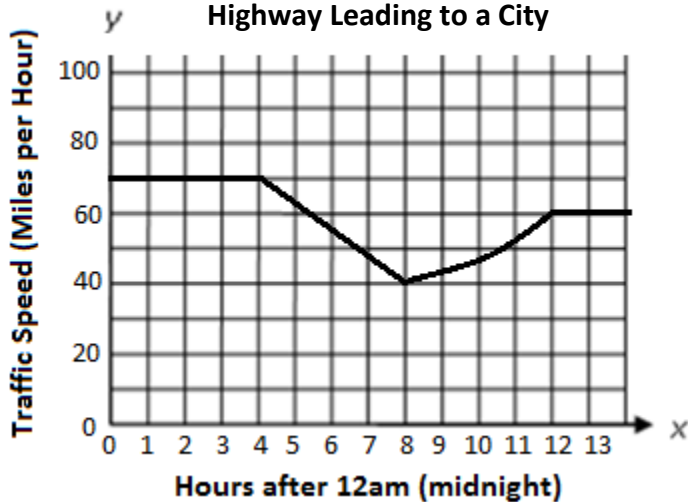


d.



Question 10

Average Traffic Speed on Highway Leading to a City



Explain in one or two sentences what this graph tells us!