

NAME:

CLASS PERIOD:

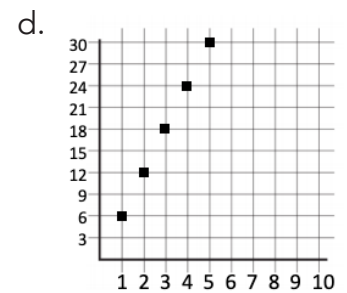
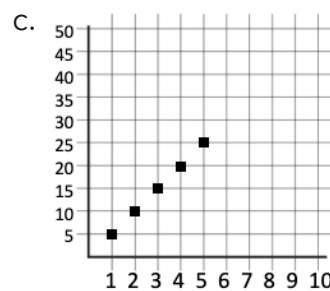
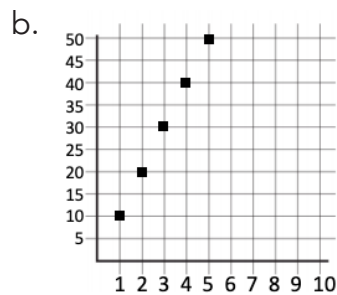
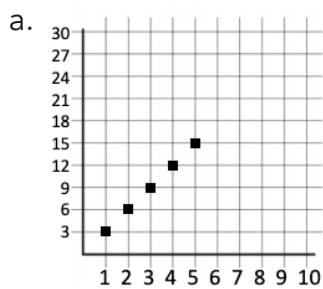
SECTION 1

1. Marley has a summer job working at a library. The table below shows how much he earns after working a certain number of hours.

Table showing number of dollars earned based on the number of hours worked:

DOLLARS	HOURS
24	4
12	2
6	1
30	5
18	3

2. Which graph shows the relationship between the numbers of minutes in the shower and the amount of gallons used? *Circle only one.*



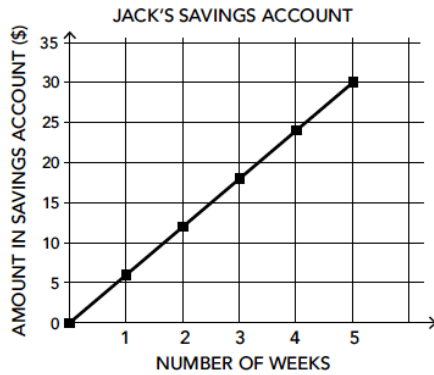
e. I don't know

3. What is the unit rate of the graph you selected above? In other words, what is Marley's salary per hour? If you don't know, write "I don't know."

4. Write an equation that represents the amount of money, m , in dollars, that Marley earns by working h hours. If you don't know, write "I don't know."

SECTION 2

Jack's savings by week:



5. Based on the graph, how much would Jack save in 6 weeks? *Mark only one.*

- \$30
- \$35
- \$36
- \$40
- I don't know

SECTION 3

Finley's savings by week:



6. Based on the graph, how much will Finley save in 8 weeks? *Mark only one.*

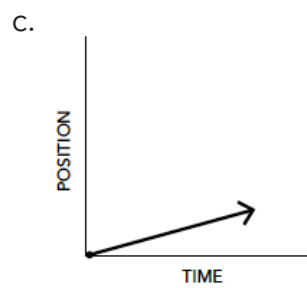
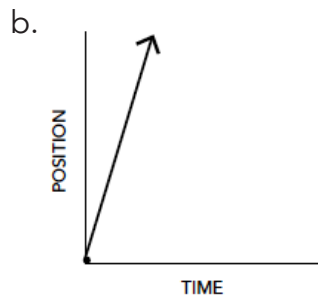
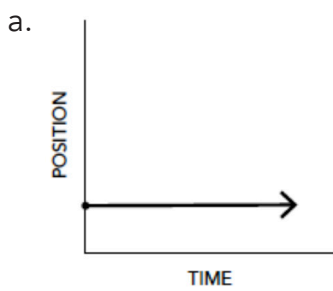
- \$12
- \$70
- \$84
- \$96
- I don't know

SECTION 4

7. What makes a relationship proportional? Give a definition. If you don't know, write "I don't know."

SECTION 5

8. Imagine the graphs represent the speed of a car. If the units and scale are all the same on all the graphs, which car is going the fastest. *Circle only one.*



- d. You need more information to tell which car is going the fastest.
- e. They are all going the same speed.
- f. I don't know.

9. Explain why you selected that answer.

SECTION 6

Given the equation, $y = 3x + 1$, answer the following questions. If you don't know, write "I don't know."

10. If $x=0$, what does y equal?

11. If $x=1$, what does y equal?

12. If $x=2$, what does y equal?

13. If $x = -2$, what does y equal?

SECTION 7

14. In order to enter the state fair, there is an admission cost. In addition, each game costs \$3. Steven went to the state fair and paid for admission and 4 games, and he spent \$20 total. How much is the admission cost alone? *Mark only one.*

- \$3.00
- \$8.00
- \$12.00
- \$20.00
- I don't know

15. Write an equation that represents the total cost (y) to play x number of games and admission. If you don't know, write "I don't know."

SECTION 8

16. For each response, circle TRUE or FALSE. If you don't know, circle "IDK"

$y=4x$ is a linear function.	TRUE	FALSE	IDK
The slope of the equation $y=3x+6$ is 3.	TRUE	FALSE	IDK
A non-linear function has a constant rate of change.	TRUE	FALSE	IDK
For a function to be linear, it must pass through the point (0, 0)	TRUE	FALSE	IDK

SECTION 9

17. Give a real life example of a linear relationship. Explain why it is a linear relationship. If you don't know, write "I don't know."

18. Give a real life example of a non-linear relationship. Explain why it is a non-linear relationship. If you don't know, write "I don't know."