

QUIZ
is
TUES
Mar
29

Name Answer Key

1 The Math Club had a car wash to raise money for a competition. The members charged \$10 for each car they washed. What is the **independent** variable in this relationship?

- the number of cars washed
- the total amount of money earned
- the amount of money charged per car
- the number of members who helped out

Total earned = $10 \times (\# \text{ cars washed})$

2 The table shows the number of points Malik and Alexia scored while playing a video game together.

Video Game Scores

Malik's Score, m	Alexia's Score, a
60	90
70	100
80	110

How do you get from m to a ?

Which equation relates Alexia's score, a , to Malik's score, m ?

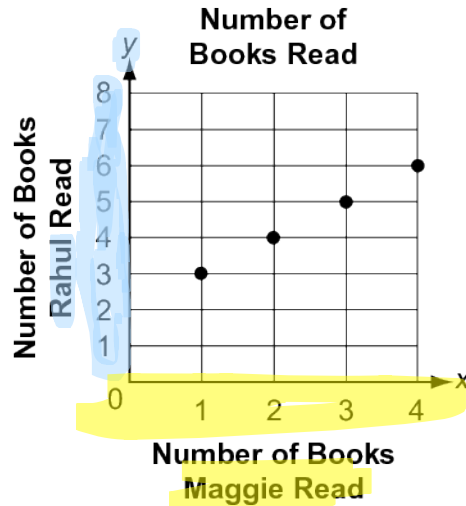
- $a = 0.5m$
- $a = 1.5m$
- $a = m + 10$
- $a = m + 30$

3 Sophia is paid \$12 per hour to babysit. Which equation represents how much money Sophia earns, d , when she babysits for h hours?

- $h = 12d$
- $h = d + 12$
- $d = 12h$
- $d = h + 12$

dollars earned = 12 times (# hours worked)

4 The graph shows the number of books **Rahul** read, y , compared with the number of books **Maggie** read, x , over the summer.



$$\begin{array}{r} x \quad 4 \\ + 2 \\ \hline 1 \quad 3 \\ 2 \quad 4 \\ 3 \quad 5 \\ 4 \quad 6 \end{array}$$

Which equation represents the relationship between the number of books read by Rahul and Maggie?

- $y = x + 2$
- $y = x + 1$
- $y = 3x$
- $y = 2x$

How many books did **Rahul** read if **Maggie** read 10 books? (show work)

$$y = (10) + 2$$

$$y = 12$$

Rahul read 12 books

How many books did **Maggie** read if **Rahul** read 20 books? (Show work)

$$20 = x + 2$$

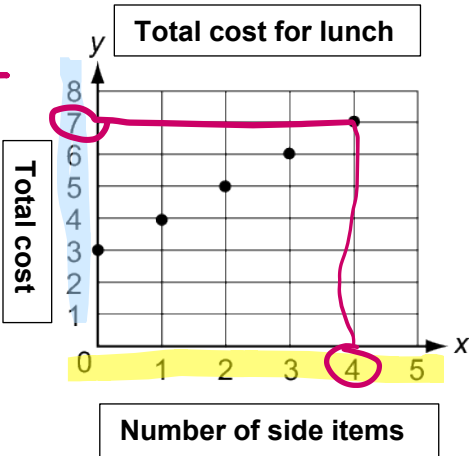
$$- 2$$

$18 = x$

Maggie read 18 books

Name _____

- 5 A sandwich costs \$3. The total cost for lunch depends on how many side items you choose. Write an equation to represent the relationship shown in the graph.



$$y = x + 3$$

- 6 Write an equation to represent the relationship shown in the table.

x	6	7	8	9
y	42	49	56	63

$$y = 7x$$

How do we get from x to y?

$$y = 7 \cdot x$$

$$y = 7(x)$$

- 7 Each day after school, Chelsey runs 2.8 miles farther than Kyle.

Part A

Write an equation that represents the number of miles Chelsey runs, c , compared with Kyle, k .

$$c = k + 2.8$$

Part B

If Kyle runs 4 miles, how many miles does Chelsey run?

$$c = (4) + 2.8$$

$$c = 6.8$$