

2024 MCAS Informational Webinar on Constructed Responses

Revised Sample Constructed-Response Scoring Training Pack

Middle School Mathematics

Question 1 - MCAS Grade 7 Mathematics Question
(released in 2023)

Hank has been hired to paint all the rooms in a hotel.

- All of the rooms in the hotel are the same size.
 - Hank will paint 3 hotel rooms every $7\frac{1}{2}$ hours.
 - Hank will paint at the same rate until the job is complete.
- A. How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.
- B. How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer
- C. Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.
- D. It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

Constructed Response Sample Response

Part A: It would take Hank 15 hours to paint 6 rooms

- $6 = 3 \times 2$, so $7\frac{1}{2} \times 2 = \frac{15}{2} \times 2 = \frac{30}{2} = 15$ OR
- Other mathematically valid work or explanation.

Part B: It takes Hank 2.5 hours to paint one room

- $15 \div 6 = 2.5$ OR
- Other mathematically valid work or explanation.

Part C: $h = \frac{5}{2}r$ OR

- Other mathematically equivalent equation

Part D: Hank painted 480 rooms.

- $1200 = \frac{5}{2}r$, $2400 = 5r$, $480 = r$ OR
- Other mathematically valid work or explanation.

Constructed Response Scoring Guide

Scoring Guide	
Score	Description
4	The student response demonstrates an exemplary understanding of the Ratios and Proportional Relationships concepts involved in computing unit rates associated with ratios of fractions. The student determines and compares unit rates in a real-world context.
3	The student response demonstrates a good understanding of the Ratios and Proportional Relationships concepts involved in computing unit rates associated with ratios of fractions. Although there is significant evidence that the student was able to recognize and apply the concepts involved, some aspect of the response is flawed. As a result, the response merits 3 points.
2	The student response demonstrates a fair understanding of the Ratios and Proportional Relationships concepts involved in computing unit rates associated with ratios of fractions. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 2 points.
1	The student response demonstrates a minimal understanding of the Ratios and Proportional Relationships concepts involved in computing unit rates associated with ratios of fractions.
0	The student response contains insufficient evidence of an understanding of the Ratios and Proportional Relationships concepts involved in computing unit rates associated with ratios of fractions. As a result, the response does not merit any points.

Constructed Response Scoring Notes

Answer-only (possible in parts A, B and D):

- One or two answer(s)-only = 1 point
- One or two answer(s)-only and Part C = 2 points
- Three answers-only = 2 points
- Three answers-only and Part C = 3 points

Scoring for each part:

Part B:

- Equivalent answers are okay including 2.5 hours, 2 hours 30 minutes; $\frac{5}{2}$ hours.

Part C:

- Student's response must be a correct equation. No credit for an expression.
- Accept any equivalent equation including:
 - $h = 2\frac{1}{2}r$; $h = \frac{5}{2}r$; $h = 2.5r$; $\frac{2}{5}h = r$; $3h = 7\frac{1}{2}r$
- Student's response must be a correct equation. No credit for an No credit for equations with reversed variables such as $r = 2.5h$ or the fraction ($h = \frac{2}{5}r$).
- Full credit for equations where the variable y is substituted for h and x is substituted for r correctly.
- It is okay to use either h or r correctly and another variable in the equation such as $t = 2.5r$ or $h = 2.5p$
- No credit for equations with different variables where the variables are not defined.
- Full credit is given for a correct equation based on an incorrect answer in part B.

Part D:

- Correct answer with no work or explanation is okay.
- Full credit is given for a correct answer based on an incorrect equation in part C.

Training Set of Student Responses
(*with scores*)

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

15 hours

$$7\frac{1}{2} = \frac{15}{2}$$

$$\frac{15}{2} \times \frac{1}{3} = \frac{5}{2}$$

$$\frac{5}{2} \times 6 = 15$$

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

2 hours and 30 minutes

$$7\frac{1}{2} = \frac{15}{2}$$

$$\frac{15}{2} \times \frac{1}{3} = \frac{5}{2}$$

$$\frac{5}{2} = \frac{x}{60}$$

$$2x = 300$$

$$x = 150$$

$$\frac{150}{60} = 2\frac{1}{2}$$

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

$$\frac{5}{2}r = h$$

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

There are 480 hotel rooms in the hotel.

$$1200 \times \frac{2}{5} = 240 \times 2 = 480$$

Training Response Score: 3

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

I know that Hank takes $7 \frac{1}{2}$ hours to paint 3 hotel rooms. Since we need to know how long he takes painting 6 rooms, we have to get the 3 to a 6. To get there, I multiply the value by 2, and do the same with the other side of the equation to get $6 = 15$ (hours). Therefore, Hank takes 15 hours to paint 6 rooms.

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

To find out how long Hank takes to paint 1 hotel room, we need the 3 to be a 1. I do that by dividing it by 3, and I also do it to the other side to get $1 = 2 \frac{1}{2}$. Therefore, Hank takes $2 \frac{1}{2}$ hours to paint 1 hotel room.

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

$$r = 2 \frac{1}{2} h$$

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

Since the equation is $r = 2 \frac{1}{2} h$, I need to plug in h for 1,200. That will lead me to getting $r = 3,000$. Therefore, there is a total of 3,000 hotel rooms.

Training Response Score: 2

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

$$7\frac{1}{2} + 7\frac{1}{2} = 15$$

itll take Hank 15 hours to paint 6 rooms.

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

$$\frac{15}{2} \times \frac{1}{3} = 2\frac{1}{2}$$

it will take Hank $2\frac{1}{2}$ hours to paint one hotel room.

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

$$x = h \times r$$

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

$$\frac{5}{2} \times \frac{1}{1,200} = \frac{240}{1}$$

there are 240 rooms in the hotel.

Training Response Score: 1

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

every $14 \frac{2}{4}$ hours he paints 6 rooms

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

it take him $2 \frac{1}{3}$ hours to paint one room

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

$$r \times 2 \frac{1}{3} = h$$

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

600 rooms

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

it will take $14 \frac{1}{2}$ hours beacse have of
6 is 3 so that meansyou would have $7 \frac{1}{2}$

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

$4 \frac{1}{4}$ i counted from 3 to get to 7 and it
4 so i did $4 + 1$

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

$$h \times r = x$$

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

60 rooms

Set of Student Responses
(without scores)
For Educator Practice

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

15

$$7 \frac{1}{2} \times 2 = 15$$

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

$$7 \frac{1}{2} = 7.5$$

$$7.5 \div 3 = 2.5$$

2.5

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

$$h = r$$

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

400

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

hotel rooms= r
hours= h
 $6r = 7.5 \times 2 = 15$
It will take Hank 15 hours to paint 6 rooms.

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

rooms= r
hours= h
 $6rooms = 15hours$
 $2rooms = 5hours$
 $r = 2.5hours$
It will take Hank 2.5 hours to paint 1 hotel room.

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

$0.4h = r$

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

$0.4 \times 1,200 = r$
 $0.4 \times 1200 = 480$
 $r = 480$
There are 480 rooms in the hotel.

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

15 hours

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

2.75 hours

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

hotel room 2.25 times r

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

171

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

$21 \frac{1}{2}$, hours because if he already painted 3 rooms and all together it took him $7 \frac{1}{2}$ hours you just multiply $7 \frac{1}{2}$ times 3.

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

$4 \frac{1}{2}$, hours because if it took him $7 \frac{1}{2}$ hours to paint 3 rooms then you would just subtract $7 \frac{1}{2}$ and 2.

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

It takes Hank h amount of hours and r amount to paint the hotel rooms.

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

the total of the rooms in the was 1,200

Part A

How many hours will it take Hank to paint 6 hotel rooms? Show or explain how you got your answer.

Hank will take 15 hours to paint 6 hotel rooms. Since 3 is half of 6 and since Hank paints as a steady rate of 7.5 hours per three rooms, he will take twice the amount of time to paint 6 rooms as he did 3. $7.5 \cdot 2 = 15$ so Hank will take 15 hours to paint 6 hotel rooms.

Part B

How many hours will it take Hank to paint 1 hotel room? Show or explain how you got your answer.

Hank will take 2.5, or $2\frac{1}{2}$ hours to paint one hotel room. 1 is $\frac{1}{3}$ of three so Hank will take $\frac{1}{3}$ of the time he takes to paint three rooms to paint 1. $\frac{7.5}{3} = 2.5$ so Hank will take 2.5 hours.

Part C

Write an equation that can be used to find h , the number of hours it will take Hank to paint r hotel rooms.

$$h = \frac{2}{5}r$$

Part D

It will take Hank 1,200 hours to paint all the hotel rooms. What is the total number of rooms in the hotel? Show or explain how you got your answer.

There are 480 rooms in the hotel. It takes Hank 2.5 hours to paint 1 room. $1200 / 2.5 = 2400 / 5 = 480$. There are 480 rooms in the hotel.

Question 2 - MCAS Grade 8 Mathematics Question
(released in 2023)

A student created this table to represent a linear relationship between x and y .

x	y
-2	10.0
-1	7.5
0	5.0
1	2.5
2	0

- A. What is the y -intercept of the line represented by the x and y values shown in the table? Show or explain how you got your answer.
- B. What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.
- C. Write an equation of the line represented by the relationship between x and y shown in the table.
- D. The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table.

Is the student correct? Show or explain how you got your answer.

Constructed Response Sample Response

Part A: 5

- The y -intercept is the value of y when $x = 0$. From the table you see that this is 5.
- Or other mathematically correct explanations

Part B: -2.5 or $-\frac{5}{2}$ or $-2\frac{1}{2}$ or other equivalent answers

- Slope is $m = \frac{7.5-10}{-1-(-2)} = \frac{-2.5}{1} = -2.5$

Part C: $y = -2.5x + 5$

- $y = mx + b$; where $m = -2.5$ and $b = 5$.

Part D: Yes, the student is correct.

- I substituted the x -value into the equation of the line to get the y -value.
- $-2.5(9) + 5 = -22.5 + 5 = -17.5$

Constructed Response Scoring Guide

Scoring Guide	
Score	Description
4	The student response demonstrates an exemplary understanding of the Functions concepts involved in constructing a function to model a linear relationship between two quantities. The student determines the y-intercept, rate of change, and equation from a table, and uses the equation to solve a problem.
3	The student response demonstrates a good understanding of the Functions concepts involved in constructing a function to model a linear relationship between two quantities. Although there is significant evidence that the student was able to recognize and apply the concepts involved, some aspect of the response is flawed. As a result, the response merits 3 points.
2	The student response demonstrates a fair understanding of the Functions concepts involved in constructing a function to model a linear relationship between two quantities. While some aspects of the task are completed correctly, others are not. The mixed evidence provided by the student merits 2 points.
1	The student response demonstrates a minimal understanding of the Functions concepts involved in constructing a function to model a linear relationship between two quantities.
0	The student response contains insufficient evidence of an understanding of the Functions concepts involved in constructing a function to model a linear relationship between two quantities. As a result, the response does not merit any points.

Constructed Response Scoring Notes

Answer-only (possible in parts A and B only):

- 1 or 2 answer(s)-only = 1 point
- 1 or 2 answer(s)-only + C (or D) = 2 points
- 1 or 2 answer(s)-only + C + D = 3 points

Scoring for each part:

Part A:

- Answers may be written as: 5, 5.0, or the point (0, 5)
- Explanations may look like,
 - The y -intercept is the value of y when $x = 0$.
 - The y -intercept is where the line crosses the y -axis.
- Students can find slope first and then find the y -intercept using the equation of the line and a point from the table.

Part B:

- Correct strategy with computation error is noted but okay.

Part C:

- Student's response must be an equation. No credit for an expression.
- Full credit is given for a correct equation based on an incorrect answer in part A and/or part B.

Part D:

- This question is dichotomous, so no credit for "Yes" only. Student must provide an explanation with the answer of "Yes" to receive full credit.
- Correct strategy includes substituting the point (9, -17.5) into their equation and solving, or continuing the table to $x = 9$ and $y = -17.5$.
 - They can also receive credit if they refer to both the x and y coordinates or the point (9, -17.5) and say that they continued the table.
- Full credit is given for a correct answer of "Yes" and explanation based on an incorrect equation in part C.

Training Set of Student Responses
(*with scores*)

Training Response Score: 4

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

The y - *intercept* of this line is 5. I figured this out because in the table when x is 0, y is 5. This is where the line intersects with the y axis.

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

$$\frac{\Delta y}{\Delta x} \\ \frac{-2.5}{1}$$

The slope of this line is -2.5 . I found this out by doing the change in y over the change in x . the change in y is -2.5 , the change in x is 1, which makes the slope -2.5 .

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

$$y = -2.5x + 5$$

Part D

The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table.

Is the student correct? Show or explain how you got your answer.

Yes, the student is correct. $(9, -17.5)$ is on the line.

$$y = -2.5x + 5$$

$$-17.5 = -2.5(9) + 5$$

$$-17.5 = -22.5 + 5$$

$$-17.5 = -17.5$$

Training Response Score: 3

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

The y -intercept is 2.5 because in the y -coordinates the difference between them is 2.5. For instance one of the coordinates is 7.5 the other is 10.00. The difference between them is 2.5.

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

The slope is -2.5 .
I got that answer because I used the formula $\frac{y_2 - y_1}{x_2 - x_1}$. I plugged in the coordinates 10 and 7.5 for the y coordinates and -2 and -1 for the x coordinates. When doing so I got $\frac{2.5}{-1}$, when simplified I got -2.5 .

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

$y = -2.5x + 5$
I got this answer because the slope I got from part B which is -2.5 . I got the slope because when looking at the x and y table I found the y -intercept which is 5. It's 5 because it has zero for the x -axis so it's right on the y -axis. After finding out both the y -intercept and slope I use $y = mx + b$ to fully construct this problem.

Part D

The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table. Is the student correct? Show or explain how you got your answer.

Yes, the student is correct.
 $y = -2.5x + 5$
Plug in the coordinates:
 $-17.5 = -2.5(9) + 5$
 $-17.5 = -22.5 + 5$
 $-17.5 = -17.5$
Sense this equation is true that means that the student was correct.

Training Response Score: 2

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

5.0

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

2.5

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

$y = 5.0x + 2.5$

Part D

The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table.

Is the student correct? Show or explain how you got your answer.

no

$$-17.5 = 5.0(9) + 2.5$$

$$-17.5 = 45 + 2.5$$

$$-17.5 = 47.5$$

the student is wrong

Training Response Score: 1

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

The y intercept is 2.

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

The slope of the line is $\frac{2.5}{1}$ because the x is +1 and the y is 2.5.

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

$10 - 2.5 = 7.5$
 $7.5 - 2.5 = 5$
 $5 - 2.5 = 2.5$
 $2.5 - 2.5 = 0$

Part D

The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table.

Is the student correct? Show or explain how you got your answer.

$3 = -2.5$
 $4 = -5$
 $5 = -7.5$
 $6 = -10$
 $7 = -12.5$
 $8 = -15$
 $9 = -17.5$
The student would be correct

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

They intercept is $y - 2.5$. I got my answer by subtracting 2.5 from each y value.

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

The slope is (1,2.5). I got my answer by writing the points on a graph.

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

$$x - 1 = y - 2.5$$

Part D

The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table.

Is the student correct? Show or explain how you got your answer.

Yes, because both numbers follow the rules of the equation.

Set of Student Responses
(without scores)
For Educator Practice

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

The y intercept is 5 because that is when the line passes through the y axis.

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

The slope is $-\frac{3}{5}$ because I plotted the points and to get the slope.

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

$y = -\frac{3}{5}x + 5$
I put the slope and y intercept into the formula.

Part D

The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table.

Is the student correct? Show or explain how you got your answer.

I think the student is correct because if x was 9 then y would be -17.5 . I continued the chart until I got to 9.

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

$$y = -5x$$

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

$$\begin{array}{r} 1,2.5 \quad 0,5 \\ 5 - 2.5 = 2.5 \\ 0 - 1 = -1 \\ \hline \frac{2.5}{-1} \end{array}$$

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

when x increases, y decreases

Part D

The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table.

Is the student correct? Show or explain how you got your answer.

no because it doesnt follow the flow of the line

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

The y intercept is $(0,5)$ because if it were on a graph, $(0,5)$ would literally be on the y axis.

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

The slope is $\frac{5}{-2}$.

I picked two random points: $(0,5)$ and $(2,0)$. I used the equation $\frac{y-y}{x-x}$ to get the slope. $5 - 0$ is 5 , and $0 - 2$ is -2 . This results in $\frac{5}{-2}$.

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

$$y = \frac{5}{-2}x + 5$$

Part D

The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table. Is the student correct? Show or explain how you got your answer.

The student is correct because if you plug $(9, -17.5)$ into the equation $y = \frac{5}{-2}x + 5$, it works.

Once it is plugged in, the equation should look like $-17.5 = \frac{5}{-2}(9) + 5$.

$\frac{5}{-2}$ multiplied by 9 is -22.5 .

-22.5 added to 5 is -17.5

$-17.5 = -17.5$

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

$y = 2.5$ because if you do 1×2.5 you get 1.5.
The others are the same you just add 5.

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

The slope is (2.5, 5) because if you keep adding than it changes.

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

$y = 2.5 + 5$ because if you do -1×2.5 you get 2.5, then you do $2.5 + 5$ it equals to 7.5.

Part D

The student says the point (9, -17.5) lies on the line represented by the relationship between x and y shown in the table.

Is the student correct? Show or explain how you got your answer.

No because if you do 9×2.5 and add 5 then you get 27.5 thats more than (9, 17.5)

Part A

What is the y -intercept of the line represented by the x and the y values shown in the table? Show or explain how you got your answer.

The Y intercept is 5, because that is were is crosses the y axis.

Part B

What is the slope of the line represented by the x and y values shown in the table? Show or explain how you got your answer.

The slope of the line that x and y values represent is $\frac{2.5}{1}$ or 2.5

Part C

Write an equation of the line represented by the relationship between x and y shown in the table.

$$y = 2.5x$$

Part D

The student says the point $(9, -17.5)$ lies on the line represented by the relationship between x and y shown in the table.

Is the student correct? Show or explain how you got your answer.

The student is correct, because if you keep on subtracting 2.5 from y and add one on x you will end up with 9,-17.5