

PSSA and Keystone Exams
Summer 2023 Workshops

PSSA, Grade 5 Math

Leon's Candy Bar Sales

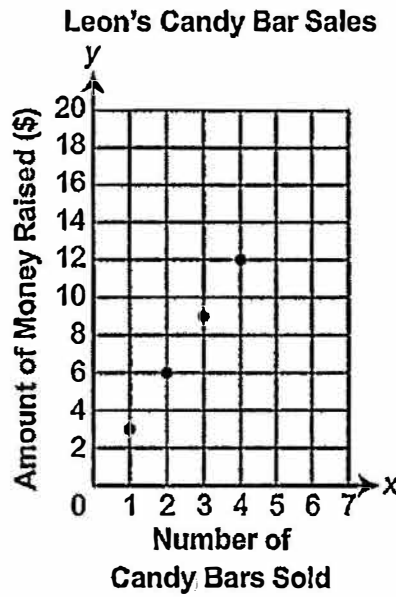
Handscoring
Practice Set 1*

*Responses in this set do not have true scores. Apply scores based on scoring criteria.

MATHEMATICS

SECTION 2

51. Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

- A. Which axis represents the number of candy bars sold?

The X axis

- B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

(6, 18)

MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

- C. Explain why it is not possible for any of the points on the graph to have a y-coordinate of 77.

It can't have a y coordinate of 77 because all the numbers on the y coordinate are even

Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

- D. What is the fewest candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

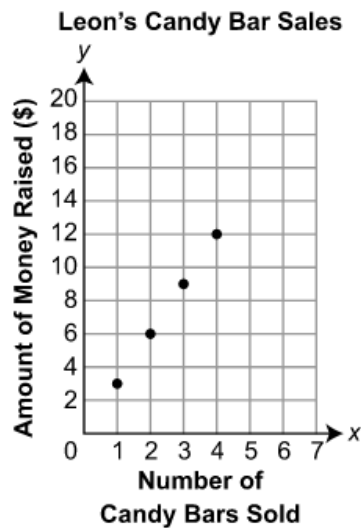
200 bars

$$\begin{array}{r} 240 \\ \times 2 \\ \hline 480 \\ + 120 \\ \hline 600 \end{array}$$

$$\begin{array}{r} 240 \\ 3 \overline{) 600} \\ \underline{312} \\ 288 \\ \underline{288} \\ 0 \end{array}$$

$$\begin{array}{r} 240 \\ 2 \overline{) 480} \\ \underline{120} \\ 240 \\ \underline{240} \\ 0 \end{array}$$

Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

A. Which axis represents the number of candy bars sold?

x

B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

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6

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15

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C. Explain why it is **not** possible for any of the points on the graph to have a y-coordinate of 77.

77 is not a multiple of 3

25 / 1000

Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

D. What is the **fewest** candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

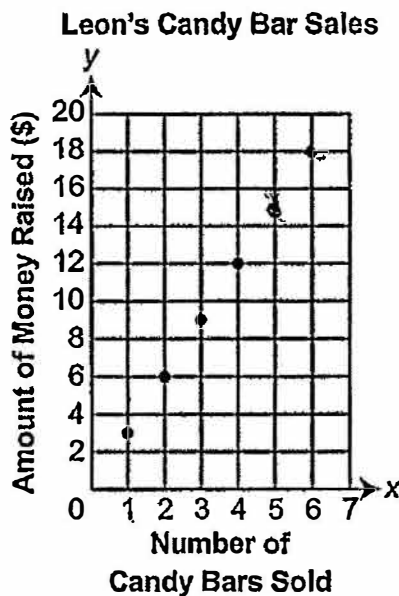
200 candy bars. First I multiplied 240 times 2.5 to get 600 which is his goal. Then I did 600 divided by 3 and got an answer of 200 candy bars.

143 / 1000

MATHEMATICS

SECTION 2

51. Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

- A. Which axis represents the number of candy bars sold?

The x Axis

- B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

(6, 18)



MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

- C. Explain why it is not possible for any of the points on the graph to have a y-coordinate of 77.

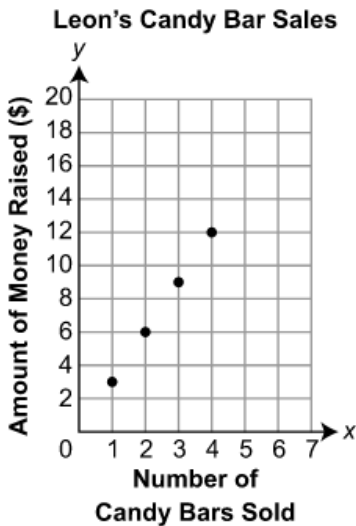
because that would mean
the x axis would have to
be 77 so

Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

- D. What is the fewest candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

$600 \div 3 = 200$ so he would
need to sell 200 candy
bars

Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

A. Which axis represents the number of candy bars sold?

y

B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

(

6

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16

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C. Explain why it is **not** possible for any of the points on the graph to have a y-coordinate of 77.

It is not possible to have a y-coordinate of 77 because all the numbers on the chart are even, and 77 is not an even number.

123 / 1000

Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

D. What is the **fewest** candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

2.5= $\frac{2}{5}$

$240 \times \frac{2}{5} = \frac{240}{1} \times \frac{2}{5} = \frac{480}{5}$

Then simplified equals $96 \frac{1}{5}$

My final answer is $96 \frac{1}{5}$

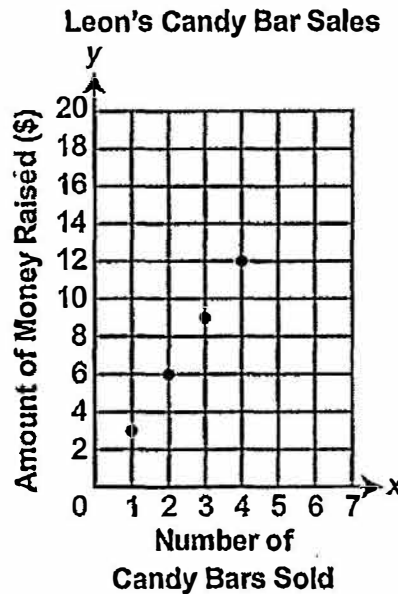
70 / 1000



MATHEMATICS

SECTION 2

51. Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

- A. Which axis represents the number of candy bars sold?

The x axis represents the amount of candy bars sold.

- B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

(6, 18)

F

MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

- C. Explain why it is not possible for any of the points on the graph to have a y-coordinate of 77.

It is not possible for any of the points have a y coordinate of 77 because 77 is not a multiple of three, making it impossible.

Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

- D. What is the fewest candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

$$240 \div 3 = 80$$

$$240 \times 2.5 = 600$$

$$600 \div 3 = 200$$

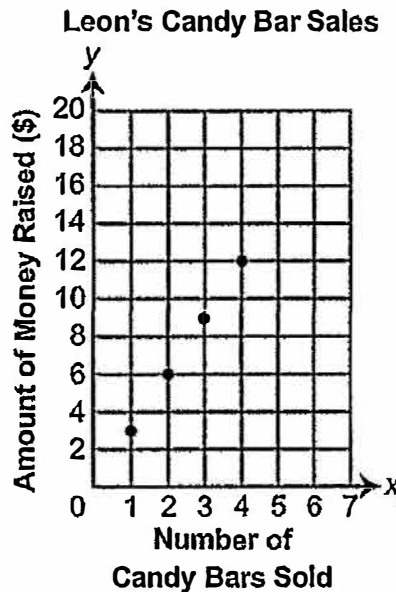
Leon needs to sell at least 200 candy bars to reach 2.5 his original amount.



MATHEMATICS

SECTION 2

51. Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

- A. Which axis represents the number of candy bars sold?

The x-axis shows the number of Candy Bars Sold

- B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

(6, 18)



MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

- C. Explain why it is not possible for any of the points on the graph to have a y-coordinate of 77.

It cannot have a y-coordinate of 77 because the y-axis on the grid only goes up to 20. So that is why it is impossible to have a y-coordinate of 77.

Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

- D. What is the fewest candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

$$240 \times 2.5 = \$600 \quad \begin{array}{l} \text{each candy bar} \\ \text{is } \$3. \end{array}$$

$$600 \div 3 = 200 \text{ candy bars}$$

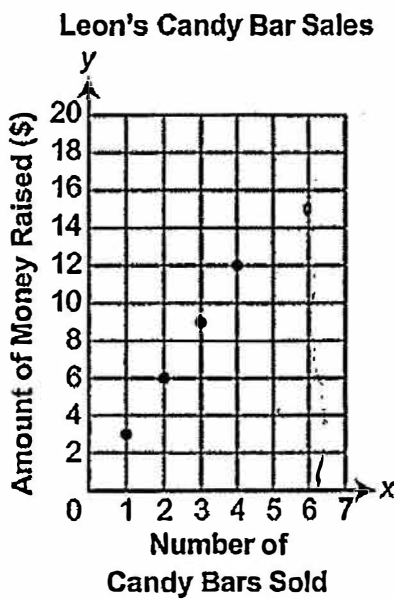
The fewest amount of candy bars Leon can sell is 200.



MATHEMATICS

SECTION 2

51. Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

- A. Which axis represents the number of candy bars sold?

The Y Axis

- B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

(6, 18)

F

MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

- C. Explain why it is not possible for any of the points on the graph to have a y-coordinate of 77.

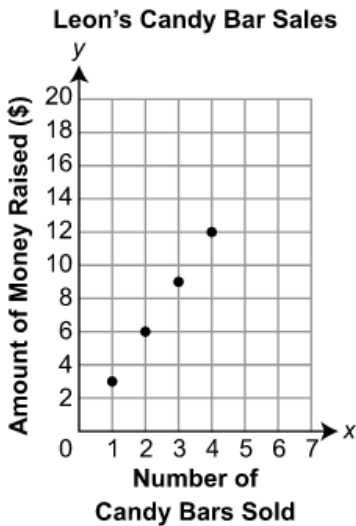
77 IS NOT AN NUMBER
ON THE GRAPH

Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

- D. What is the fewest candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

1,500
candy
bars

Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

A. Which axis represents the number of candy bars sold?

x

B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

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2

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C. Explain why it is **not** possible for any of the points on the graph to have a y-coordinate of 77.

It is not possible because 77 is an odd number and it goes up by 2's, which is an even number.

94 / 1000

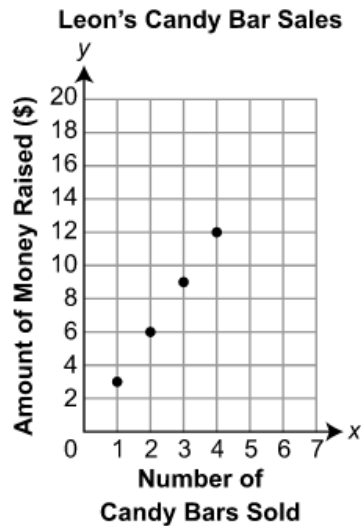
Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

D. What is the **fewest** candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

200, because if you multiply \$240 by 2.5 you get 600. If you divide 600 by 3 since he get's \$3.00 for each candy bar he sells then you get 200.

143 / 1000

Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

A. Which axis represents the number of candy bars sold?

Axis x

B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

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6

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18

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C. Explain why it is **not** possible for any of the points on the graph to have a y-coordinate of 77.

77 would not be a y-coordinate of any point because it is not a multiple of 3. Each candy bar is \$3, so the number of candy bars sold would have to be multiplied by 3 to get the total amount of money raised on that purchase. This is why there would not be a y-coordinate of 77.

277 / 1000

Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

D. What is the **fewest** candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

Leon would need to sell 200 candy bars in order to reach his goal. I know this because first, I multiplied what he already hade made, \$240, times 2.5 because he wanted to get that much more money. The total was \$600. I know that each candy bar costs \$3, so I divided \$600 by \$3 and got 200. So, Leon would need to sell 200 candy bars in order to reach his goal of making 2.5 times his old total money raised.

408 / 1000

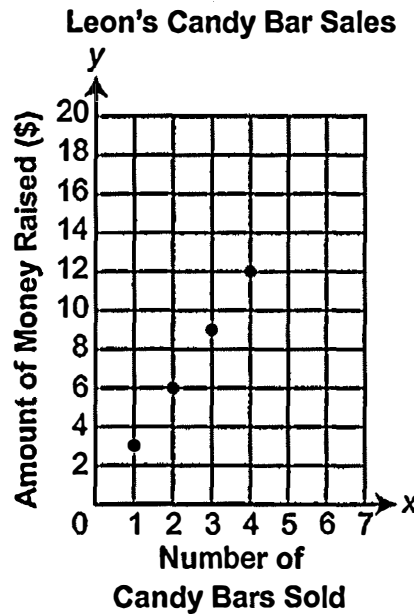


MATHEMATICS

SECTION 2



51. Leon is selling candy bars for a school fundraiser. He raises \$3.00 for each candy bar he sells. The graph shown below represents the total amount of money, in dollars, Leon has raised based on the number of candy bars he has sold.



The pattern continues.

- A. Which axis represents the number of candy bars sold?

The x axis

- B. Write the ordered pair that represents the amount of money Leon raises for selling 6 candy bars.

(6, 18)



MATHEMATICS

SECTION 2

51. *Continued.* Please refer to the previous page for task explanation.

- C. Explain why it is **not** possible for any of the points on the graph to have a y-coordinate of 77.

Because 77 is not a multiple of 3.

Last year, Leon raised a total of \$240 from his candy bar sales. This year, his goal is to raise at least 2.5 times that amount.

- D. What is the **fewest** candy bars Leon needs to sell to reach his goal for this year? Show or explain all your work.

$$\begin{array}{l} \text{last year goal} \\ \$240 \div 2.5 = \$96 \div \$ = 32 \text{ candy bars needed.} \end{array}$$

Leon needs to sell 32 candy bars.

PRACTICE SET 1* Item:

Subject: Math

Leon's Candy Bar Sales

Grade:5

Name _____

Number	Score	Consensus	Notes
P1-1			
P1-2			
P1-3			
P1-4			
P1-5			
P1-6			
P1-7			
P1-8			
P1-9			
P1-10			

* Responses in this set do not have true scores. Apply scores based on scoring criteria.