Training Header Sheet with Change Log Form

Kentucky Math Operational

Grade 6
Filling container with water
MA0620058

Anchor Set

Date	Comments	Version
2.2022	Initial Operational Training Set	Set A

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.
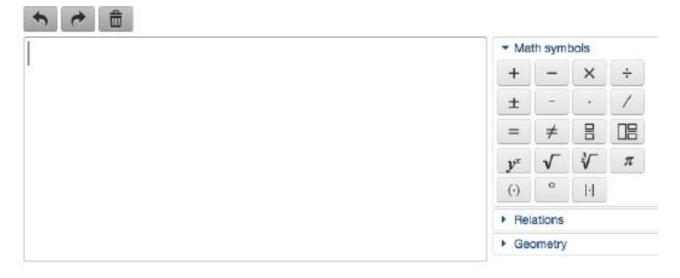
Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

- Math symbols

+	−	×	÷
±	–	·	/
=	≠	8/8	□/□
y^x	√	∛	π
(·)	°	|·|

▶ Relations
▶ Geometry

Rubric

Rubric	
Score Point 2	Student demonstrates a complete understanding of analyzing the relationship between the dependent and independent variables using a table to answer a question.
Score Point 1	Student demonstrates a partial understanding of analyzing the relationship between the dependent and independent variables using a table to answer a question.
Score Point 0	Student response is completely incorrect or irrelevant.
Blank	No student response.

Score Points	• Score 2 points:
	    ○ Correct answer with a complete explanation or complete work shown.
	• Score 1 point:
	    ○ Correct answer with a partial explanation or partial work shown.

Correct Answers	The water is flowing into the container at a constant rate of 2 gallons per minute. The container is empty at the start so I can use ratios to find the time at which the container will be full of water. $\dfrac{1}{2} = \dfrac{12.5}{6.25}$ The water will start to overflow after 6.25 minutes.

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.

Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

It will take 6.25 minutes for it to start over flowing. I know this because 2 gallons get pumped per minute so when you conver it 2 gallons x 6.25 will get you 12.5 minutes. And that is why I think it will start over flowing at 6.25 minutes.

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.

Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

A.)It will start overflow in 6.25 min

B.)12.5 divided by $1.5 = 8.333333333$. Then I did 0.75 times 8.333333333 to get 6.25

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.

Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

if a container is able to hold 12.5 galons of water how much time before it overflows what you do is you add your time which is $0.75 + 0.25 = 1.00$ then you gotta add the water $1.5 + 0.5 = 2$ gallons then 2 4 6 8 10 12g with 6 mins then add $0.25 = 6.25$ then have 12 gallons $25 = o \cdot 0.5$ it overflows at 12.5 gallons

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.

Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

After 6 minutes and 25 seconds the container will start to over flow.That will happen because every 50 seconds 1 gallon of water is filled , so when we multiply $12.5 \times 0.5 = 6.25$.Also, the 0.5 represents 50 seconds and .25 represents 25 seconds.The container can only hold 12.5 gallons so it all adds up.

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.

Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

The Container will start to over flow after 6.25 minutes.

This is because if the table countinues once the amount of the gallons that are in the container is at 12.5 the container will overflow. but it will take 6.5 miunets for it to overflow

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.

Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

in 6.25 minutes the container will over flow i got this by going up by o.25 in minutes and 0.5 in the amout of water until i reached 12.25

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.

Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

$12.5 \div 0.5 = 25$

After 25 minutes the container will over flow .

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.

Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

The answer is 50 minutes because 12.5, the amount of water the container can hold, divided by .25, the amount of time it takes for the container to be filled to a half a gallon, is 50.

Brian uses a water hose to fill an empty container with water. The amount of water in the container increases at a constant rate. The relationship between the amount of water in the container and time is shown in the table.

Container

Time (minutes)	0.25	0.5	0.75
Amount of Water (gallons)	0.5	1	1.5

The container can hold a maximum of 12.5 gallons of water.

- After how many minutes will the container begin to overflow?
- Show your work or explain how you determined your answer.

Enter your answer and your work or explanation in the space provided.

After 37.5 minutes it will begin to overflow I got this answer because I mutiplied 25 by .75. $25 \times .75$