

Summer Week 8 Lesson 2 – 16.06.20

STARTER: Short and long multiplication - You can use the expanded or compact methods.

Year 4 (Year 5 – you can do these as well if you want to):

a) $453 \times 4 =$ b) $1573 \times 6 =$

Year 5 (Year 4 – you can try these if you want to):

a) $465 \times 12 =$ b) $9573 \times 76 =$



Steppingstone activity

Summer Week 8 Lesson 2 – 16.06.20

LO: To read and interpret line graphs

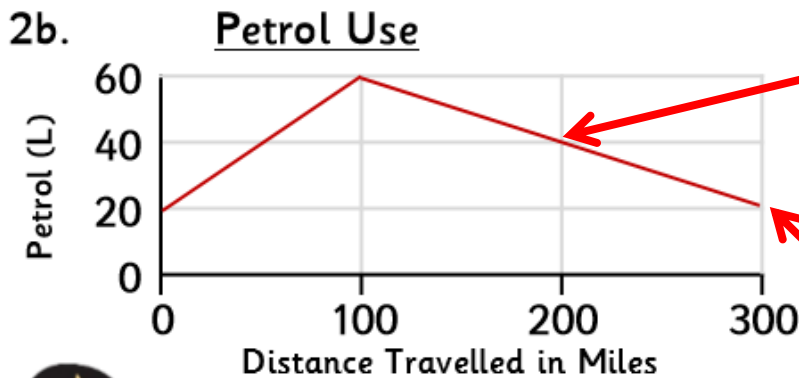
Task:

You are going to look at line graphs, which show us continuous (changing) data, and use your reasoning and problem solving skills.

Success Criteria:

- | |
|--|
| 1. Read the problem carefully. |
| 2. Look carefully at what the data is showing you. |
| 3. Use the axes to guide you. |

Model:



Talia is correct because she has read the point where the line crosses 40l as 200 miles.

Deni has misread the graph: at 300 miles there is still 20l of petrol left.



At 200 miles there were 40 litres left.

The car ran out of petrol at 300 miles.



Explain who is correct.

1a. The children are looking at recording how many brothers and sisters they each have. They gather all the answers in a tally chart.

Would you use a line graph or bar chart to represent this data?

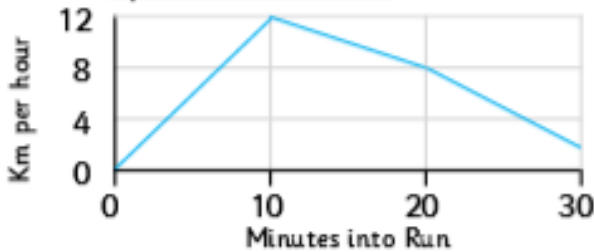


Explain your answer.



4 R

2a. Speed of a Runner



Greg

At 8 mins he is running at 20km per hour.

At 10 mins he is running at 12km per hour.



Heidi

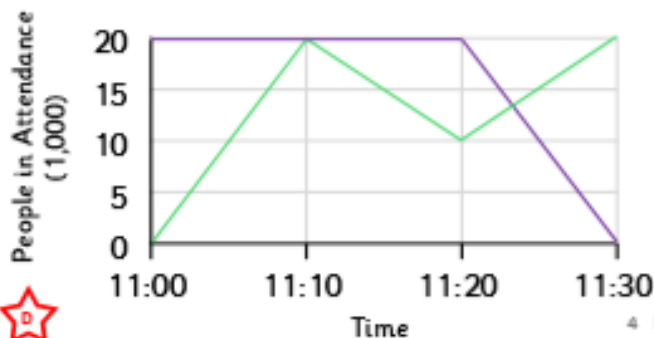
Explain who is correct.



4 R

3a. A music festival started at 11am. After 20 minutes, the fire alarm sounded and everyone was evacuated.

Which line on the graph shows what happened?



4 PS

4a. Children are collecting information about the places people spend their summer holidays. They can answer using a number of categories: home, UK, Europe, America, other.

Would you use a line graph or bar chart to represent this data?

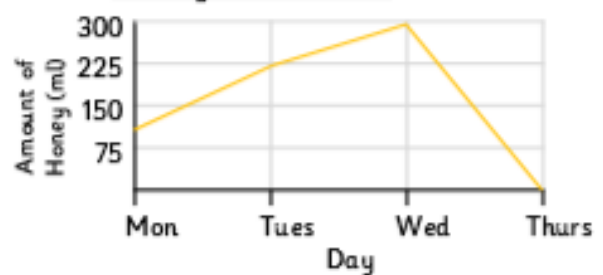


Explain your answer.



4 R

5a. Honey in the Hive



Hakeem

On Wednesday, there was 300ml of honey.

Thursday is honey collection day.



Hannah

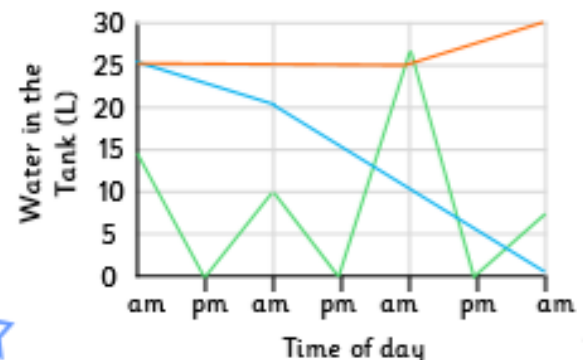
Explain who is correct.



4 R

6a. Every day, Jim empties the rain from his EcoTank to water his garden.

Which line on the graph shows what happens to the volume of water in the tank?



4 PS

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LO: To read and interpret line graphs

Task:

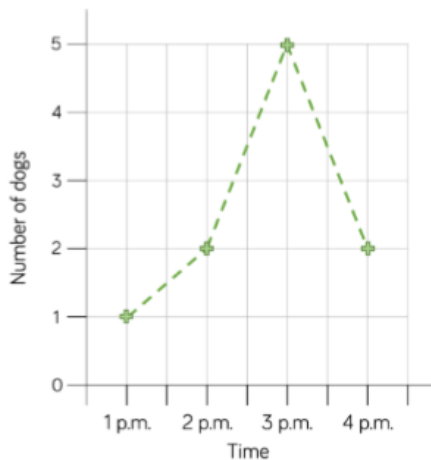
You are going to look at line graphs, which show us continuous (changing) data, and use your reasoning and problem solving skills.

Success Criteria:

1. Read the problem carefully.
2. Look carefully at what the data is showing you.
3. Use the axes to guide you.
1. Explain your answers clearly and in detail

Model:

Tommy created a line graph to show the number of dogs walking in the park one afternoon.



Tommy says,



At half past one there are 1.5 dogs in the park.

Why is Tommy incorrect?

What would be a better way of presenting this data?

Tommy is incorrect because you cannot have 1.5 dogs.

A better way of presenting this data would be using a bar chart, pictogram or table because the data is discrete.

MILD

4b. A research team is monitoring the weight of a new born baby when he moves from milk to solids. The baby will be weighed in pounds and ounces.

Would you use a line graph or bar chart to represent this data?

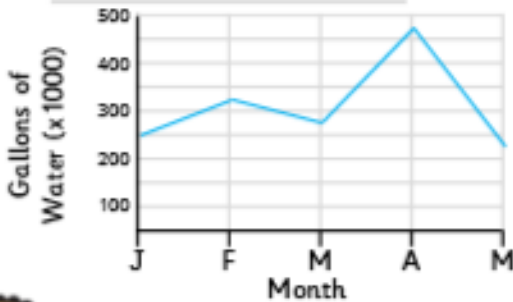
Explain your answer.



4 R



5b. Water in the Reservoir



Mylo

The water increases as the year goes on.



Luke

The most water was recorded in April.

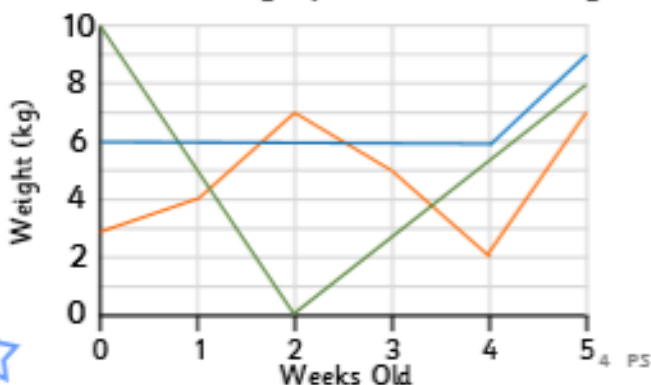
Explain who is correct.

4 R



6b. A farmer is worried about his lamb. Its weight has been dropping since it was 2 weeks old. By 5 weeks, the lamb is fully recovered.

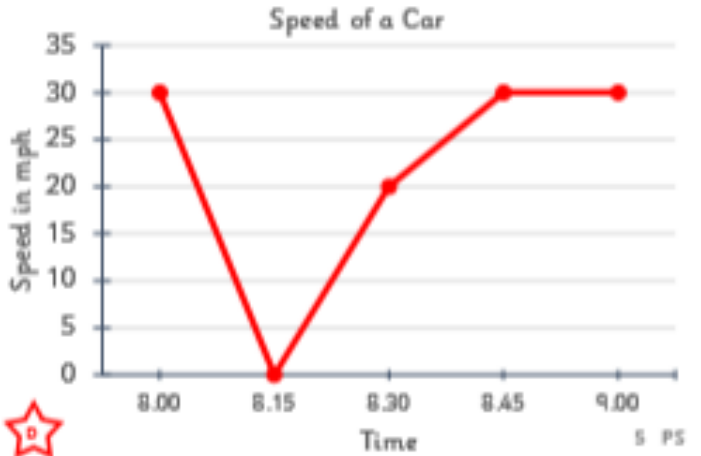
Which line on the graph shows the weight?



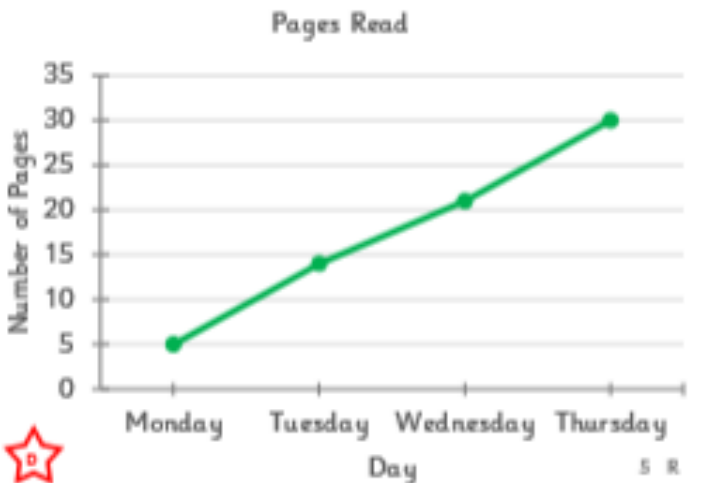
4 PS



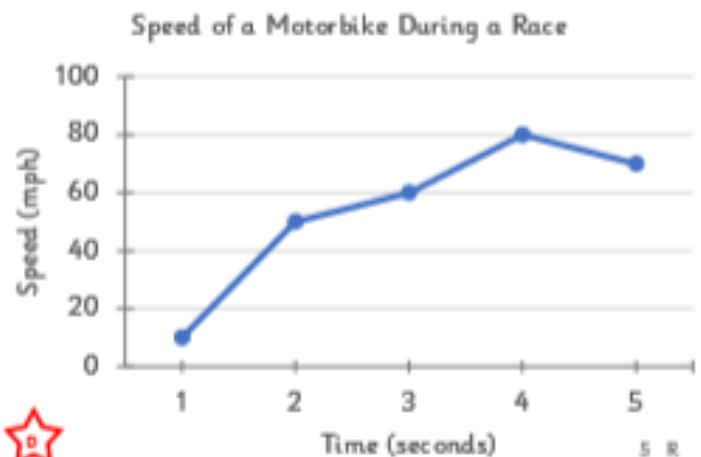
1a. What could have happened at 8:15? Write a story to match the data.



2a. True or false? Jen is half way through her 90 page book on Thursday.



3a. Freddie said that the motorbike took 5 seconds to reach its top speed. Is he correct? Explain why.



5 R

SPICY

7a. A farmer is monitoring the weight of a poorly piglet compared to the weight of a healthy piglet for the next three weeks to show the vet.

Would you use a line graph or bar chart to represent this data?

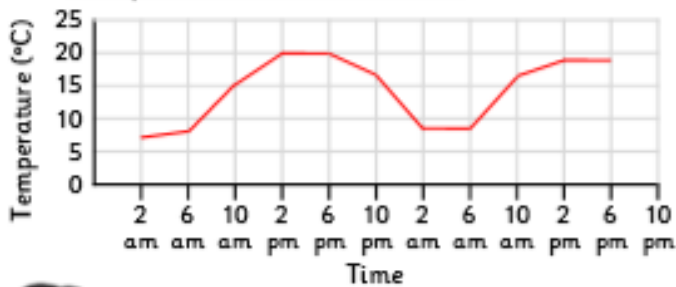
Explain your answer.



4 R



8a. Temperature of the House



Zahara

There can't be two 2am readings.

The readings are colder when everyone sleeps.



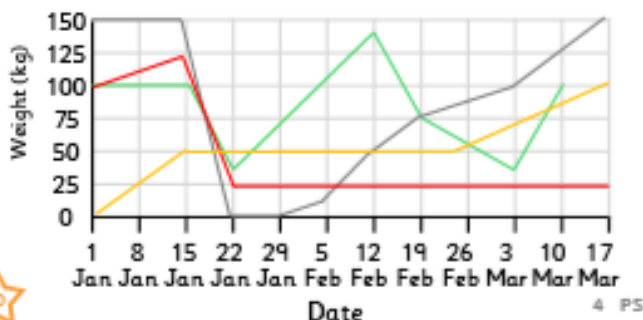
Lou
4 R

Explain who is correct.



9a. A weightlifter records his recovery after an injury. It takes him 4 weeks to return to lifting half his pre-injury weights and 8 weeks to recover fully.

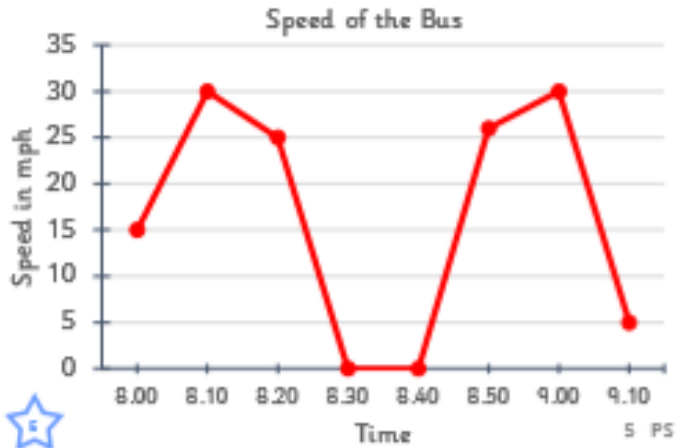
Which line on the graph shows what happened?



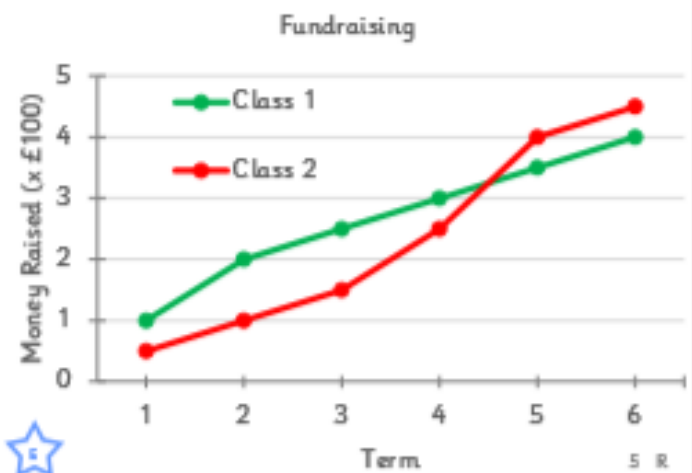
4 PS



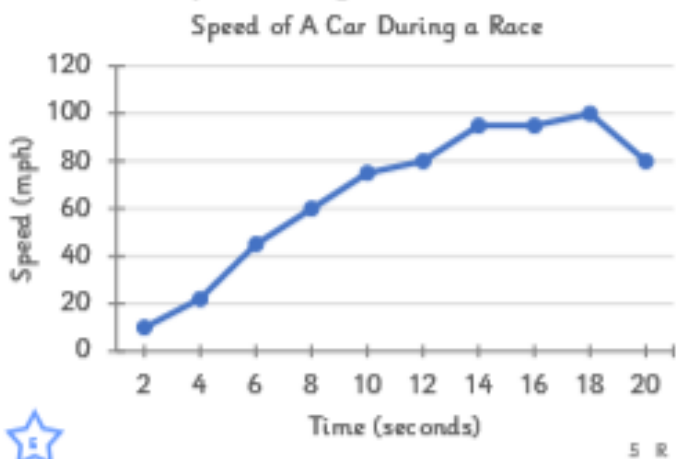
4a. What could have happened between 8:30 and 8:40? Write a story to match the data.



5a. True or false. The difference in totals between each class is £5.



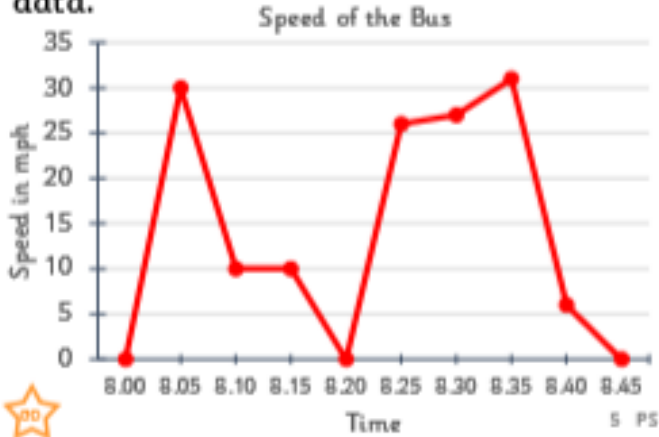
6a. Peter said that his car took 14 seconds to reach its top speed. Is he correct? Explain why.



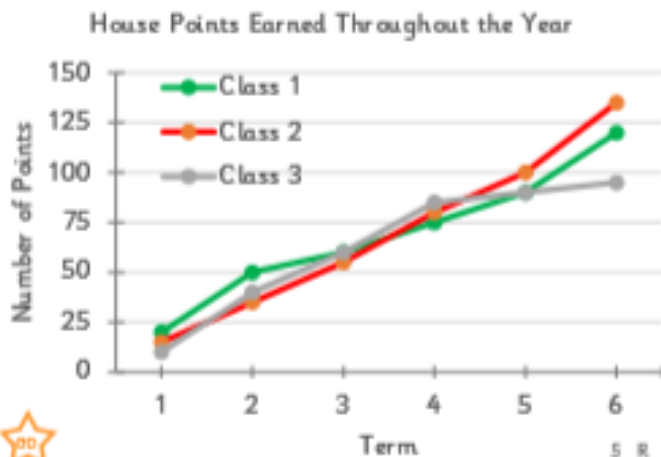
5 R

RED HOT

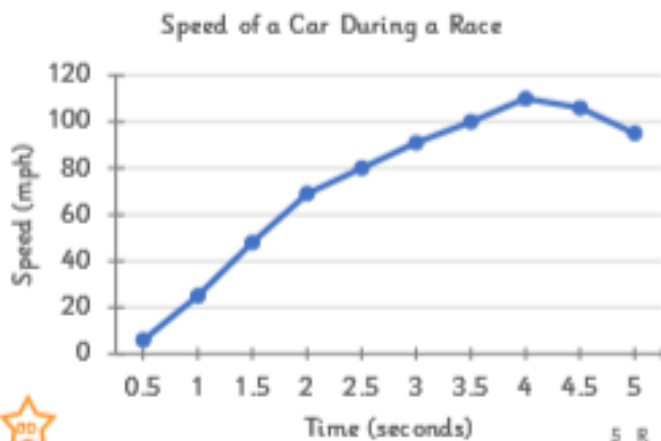
7a. Jack recorded the speed he travelled during his journey to school every 5 minutes. Write a story to match the data.



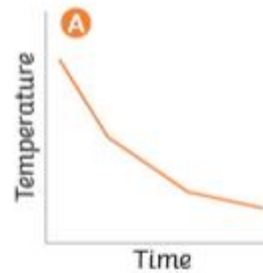
8a. True or false? Class 2 earned more house points than Class 1 and Class 3 combined.



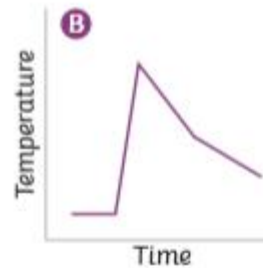
9a. Isaac said that the car took 4.5 seconds to reach its top speed. Is he correct? Explain why.



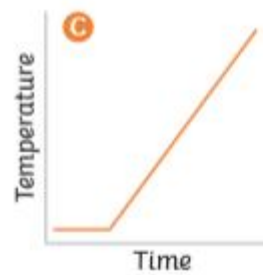
1) Match each graph to the correct story and explain your reasoning.



a) Zoe takes her hot chocolate out of the microwave. She then leaves the drink on the side to cool gradually before she drinks it at a pleasant temperature.



b) Ayaan takes his soup out of the fridge. He pours it into a saucepan and heats it gradually up on the hob.



c) Zara takes her juice out of the fridge. The drink is too cold for her, so she warms it up quickly in the microwave. She must then wait a little while for it to cool so it isn't too hot to drink. But, when she does drink it, it is just right.



2) Eddie wants to eat some soup. Based on this line graph, write a story about how the temperature of the soup changed over time.

