

Bronze

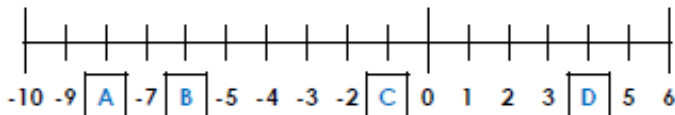
1a. Identify the numbers represented by the letters.

-1

4

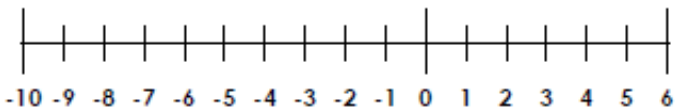
-6

-8



VF

2a. If the temperature in Dublin is 6°C and the temperature in Norway is -8°C , what is the difference between the two temperatures? Use the number line to help.

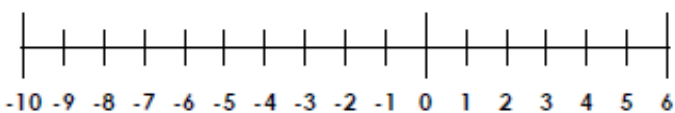


VF

3a. Identify the coldest temperature in each set of data and label it on the number line below.

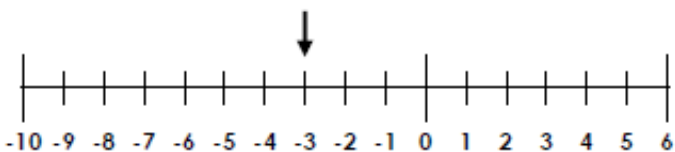
A. 5 -1 0 6 -5 4

B. -4 6 -7 10 5 -1



VF

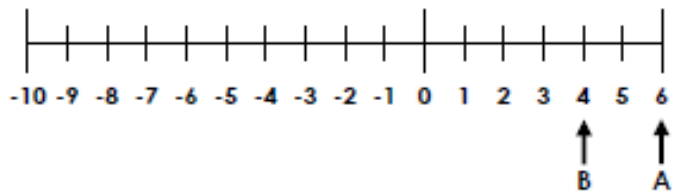
4a. True or false? The arrow is pointing to 3 on the number line below.



1b. Bert has recorded each answer to the questions below on the number line.

A. 3 subtract 9

B. 8 more than -4

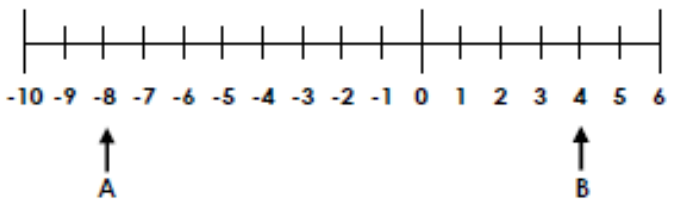


Is he correct? Explain your answer.



R

2b. Punita thinks that the number that lies halfway between A and B is 0.



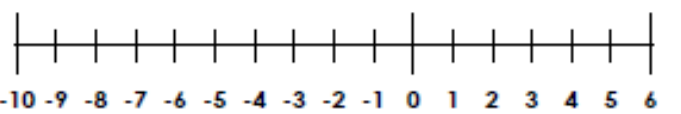
Is she correct? Prove it.



R

3b. Sinead had £6 in her account. She paid her phone bill online but now she is overdrawn by £9. How much was her phone bill?

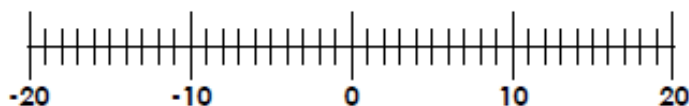
Use the number line below for support.



Silver

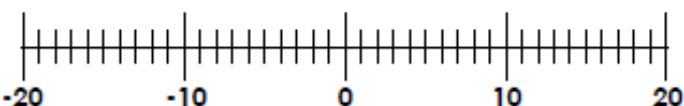
5a. Write the numbers below on the number line.

12 -15 -1 -4 7



VF

6a. If the temperature in Leeds is 18°C and the temperature in Helsinki is -13°C , what is the difference between the two temperatures? Use the number line to help.

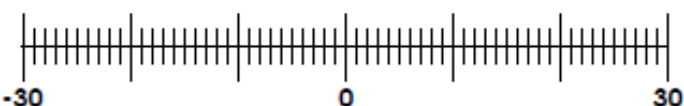


VF

7a. Identify the coldest temperature in each set of data and mark it on the number line below.

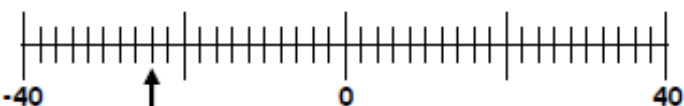
A. -28 30 -21 17 -10 28

B. 9 21 -17 -23 29 -21



VF

8a. True or false? The arrow is pointing to -12 on the number line below.

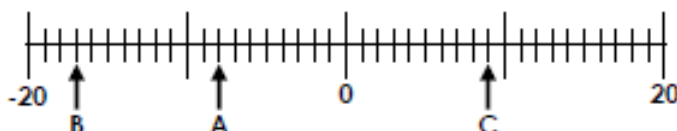


4b. Betty has recorded each answer to the questions below on the number line.

A. Fifteen less than seven

B. 4 more than negative 13

C. The difference between 5 and -4

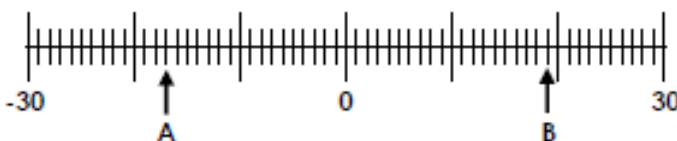


Is she correct? Explain your answer.



R

5b. Avneet thinks that the number that lies halfway between A and B is 2.



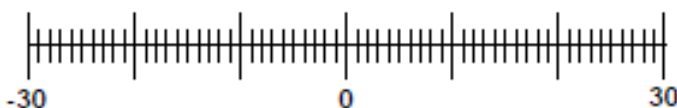
Is he correct? Prove it.



R

6b. Hanin had £23 in her bank account. On Wednesday, she spent £16. On Thursday, she paid a £22 electricity bill. How much money does Hanin have in her bank account now?

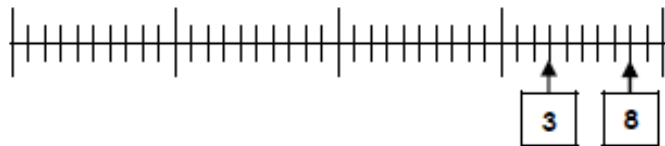
Use the number line below for support.



Gold

9a. Write the numbers below on the number line.

-22 **-1** **-29** **-18** **-12**



VF

10a. If the temperature in Norfolk is 19°C and the temperature in Oymyakon is -32°C , what is the difference between the two temperatures? Use the number line to help.

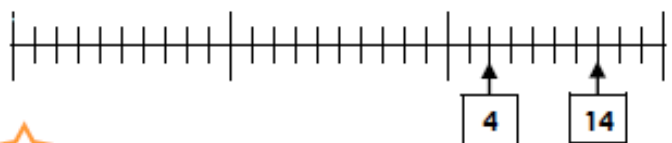


VF

11a. Identify the coldest temperature in each set of data and mark it on the number line below.

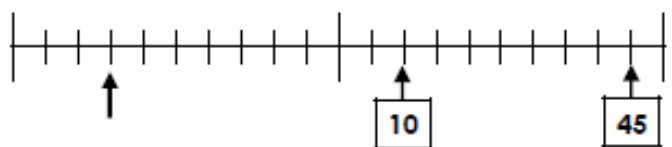
A. **-19** **18** **-4** **11** **-35** **5**

B. **-23** **8** **-22** **-19** **20** **-2**



VF

12a. True or false? The arrow is pointing to 35 on the number line below.

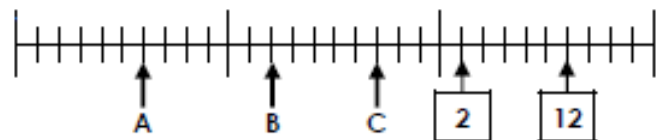


7b. Brian has recorded each answer to the questions below on the number line.

A. Thirty-six less than eight

B. The difference between 6 and -10

C. 32 more than negative 38

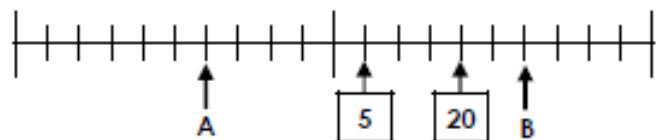


Is he correct? Explain your answer.



R

8b. Annabel thinks that the number that lies halfway between A and B is 0.



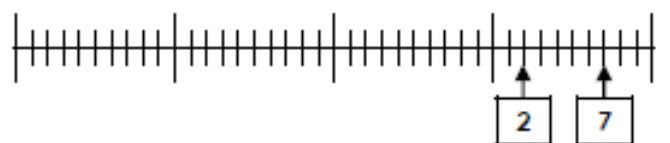
Is she correct? Prove it.



R

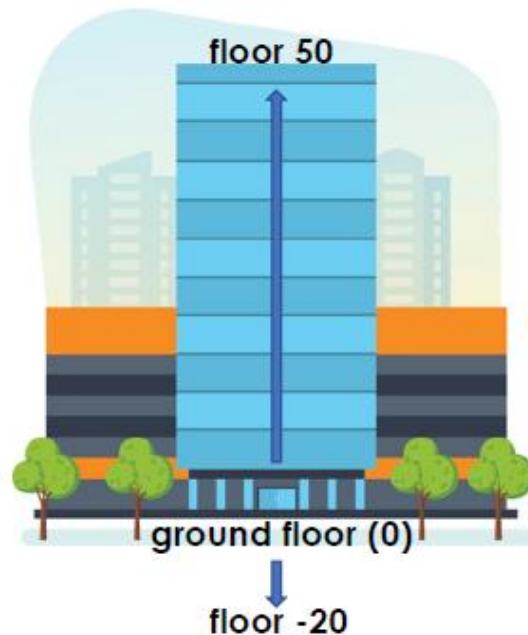
9b. Chuan had £8 in his bank account. On Wednesday, he spent £16 and on Thursday, he spent £23. On Friday, he was refunded the money for a damaged top he'd returned. His bank balance is now -£13. How much was the refund?

Use the number line below for support.



Challenge

1. This office block goes from floor -20 to floor 50. Martin is on floor -16 and needs to get to the ground floor (0). However, the lift is faulty and will only ascend or descend in multiples of 3 or 7.



How many different ways can the lift travel to reach the ground floor?

2. Karen and Rory are collecting jewels from under the sea and returning them to the treasure chest which is hidden in the sand dunes 20m above the sea. Each time, they must start at the treasure chest. There is more than one of each jewel, but they can only collect one at a time.

When they have collected six of the jewels in total, Karen has travelled a vertical distance of 250m and Rory has travelled a vertical distance of 220m.

Which jewels could they each have collected?

