1. A certain company started the day with a stock value of $68\frac{1}{5}$ points. Over the next four days, the stock had a drop of $\frac{1}{2}$ point, a drop of $\frac{2}{5}$ point a rise of $1\frac{1}{5}$ points, and a rise of $\frac{2}{5}$ point. What was the value of the stock after the four days?

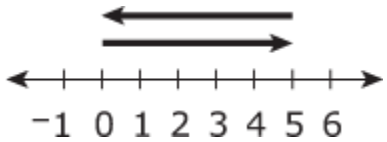
A $65\frac{7}{10}$

B $67\frac{1}{2}$

C $68\frac{9}{10}$

D $70\frac{7}{10}$

2. A number line is shown.



Which equation is **best** represented by the number line model?

A 5 + –5 = 0
B 5 + –5 = 10
C –5 + –5 = 0
D –5 + –5 = –10

3. A scuba diver is taking pictures of fish in the Atlantic Ocean. Starting at sea level, he dives $23\frac{1}{4}$ feet into the ocean and takes a set of pictures. He then rises 12.5 feet to take a second set of pictures. Finally, he dives 15 feet deeper to take his final set of pictures.

Part A: Write an expression involving addition to find the total change in the diver's elevation.

Part B: What is the total change in his elevation after taking the three sets of pictures?

4. Which two integers are 7 units away from the number 5 on a number line?

A –2 and 2
B –2 and 7
C –7 and 7
D –2 and 12

5. Where is the result of –5 + 3 located on the number line?

A 3 units to the right of –5
B 3 units to the left of –5
C 5 units to the right of 3
D 5 units to the left of –3

6. What does the value of –8 –(–2) represent on the number line?

A a value that is 2 units from –8 in the positive direction
B a value that is 2 units from 8 in the positive direction
C a value that is 2 units from –8 in the negative direction
D a value that is 2 units from 8 in the negative direction

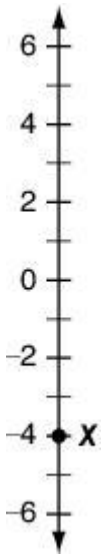
7. Point *p* is located at –6 on a number line. What statement describes a correct interpretation of the expression –6 + | –1 |?

A –5 is 1 unit from –6
B –5 is 6 units from –1
C –6 and –1 are 5 units apart
D –6 and –1 are –5 units apart

8. The offense of a high school football team gained 8 yards on first down and then lost 5 yards on second down. What expression represents the total amount of yards gained by the offense?

A 8 + (–5)
B 8 – (–5)
C 5 + (–8)
D 8 + (–5)

9. Point *X* starts at –4 on the vertical number line.



Point *X* then goes through a series of moves:

- +3 units
- –2 units
- +6 units
- –5 units

What is the final position of Point *X*?

A 3
B –2
C –4
D –5

10. Evaluate the expression below.

$$25 + (-17) + 16$$

If a 4th number was added to this expression to make the value of the new expression equal 0, what would the 4th number be?

A –26
B –24
C 24
D 26

11. Three friends, Susan, Rachel, and Mary, are staying in a hotel. Susan's room is 4 floors above Mary's room. Mary's room is 3 floors below Rachel's room. Rachel's room is on the eighth floor. On which floor is Susan staying?

A fifteenth
B ninth
C seventh
D first

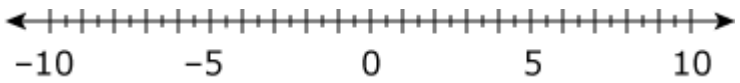
12. Use the equation below to answer the question.

$$-\frac{3}{2}+x=0$$

What is the value of *x* in the given equation?

A $-\frac{3}{2}$
B -3
C $\frac{3}{2}$
D 3

13. Tina chose two points on this number line.



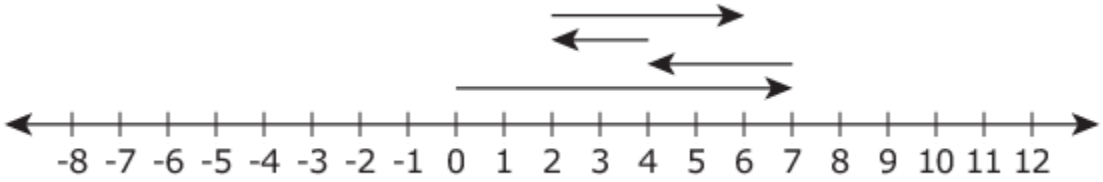
If the distance between the two points is between 2 and 3 units, which pair of numbers could be the points Tina chose?

A $-3\frac{1}{2}$ and 1
B $-3\frac{1}{2}$ and -6
C $3\frac{1}{2}$ and -4
D $3\frac{1}{2}$ and 4

14. Which number line represents the expression 7 + (–3) + (–2) +4?

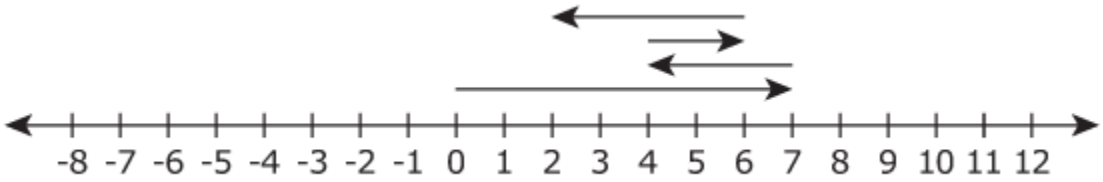
A

B



C

D



15. For a school science project, John noted the temperature at the same time every day for one week. The high temperature for the week was 27°F, and the low temperature for the week was –3°F. What is the difference between the high and low temperatures John recorded?

A 30°F
B 24°F
C –24°F
D –30°F

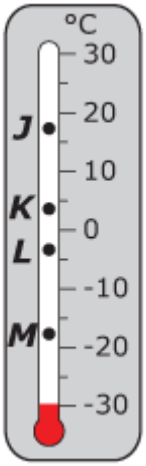
16. Which real-world context could be represented by –2 + 5 + 7?

A A puppy's weight decreasing by 2 ounces, then gaining 5 ounces, and then gaining 7 ounces.
B A share of stock losing 2 points, then losing 5 points, and then losing 7 points.
C The temperature falling 2 degrees, rising 5 degrees, and then falling 7 degrees.
D A bank statement showing a withdrawal of $2, a withdrawal of $5, and a deposit of $7 for a bank account.

17. The total weight of a mother carrying a child is $145\frac{1}{2}$ pounds. If the child weighs *n* pounds and the mother weighs 138 pounds, which sum can be used to find *n*?

A $-145\frac{1}{2} + 138$
B $145\frac{1}{2} + 138$
C $-145\frac{1}{2} + (-138)$
D $145\frac{1}{2} + (-138)$

18. On a winter day, the temperature at 8 a.m. was –6.8°C. At 2 p.m., the temperature had changed by 10.7°C.



Which points on the thermometer could be the temperature at 2 p.m.?

A points *J* and *K*
B points *K* and *M*
C points *L* and *M*
D points *J* and *L*