PART 3 Concepts and Application

Choose the correct answer.
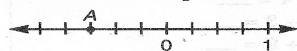
16. If $y = 3$, which number sentence is true?
    - Ⓐ $4y < 10$
    - Ⓑ $7y < 20$
    - Ⓒ $7y > 20$
    - Ⓓ $7y = 20$

17. If $4x - 2 = 10$, then $x = \square$.
    - Ⓐ 6
    - Ⓑ 2
    - Ⓒ 3
    - Ⓓ 5

18. The nature club makes twice as much money selling nature calendars as it does selling nature cards. If the club made $54 on the sale of calendars, which expression could be used to find out how much money was made on the sale of cards?
    - Ⓐ $n \div 54 = 2$
    - Ⓑ $54 - 2n$
    - Ⓒ $2n = 54$
    - Ⓓ $54n - 2n$

19. On January 1, the temperature was 0°. The temperature rose 2° each day for 3 days. Then the temperature fell 4° each day for 4 days. What was the temperature at the end of the 7 days?
    - Ⓐ ⁻10°
    - Ⓑ ⁻2°
    - Ⓒ ⁻16°
    - Ⓓ 10°

20. Which equation is satisfied by the pairs of numbers in the table?

x	4	6	8	10
y	⁻2	0	2	4

    - Ⓐ $y = 6 - x$
    - Ⓑ $y = x + 6$
    - Ⓒ $y = x - 6$
    - Ⓓ $y = x \div 2 + 1$

21. Which expression does not correspond with the equation $n + 6 = 35$?
    - Ⓐ The sum of a number and 6 is 35.
    - Ⓑ A number decreased by 6 is 35.
    - Ⓒ Six more than a number is 35.
    - Ⓓ The total of 6 and a number is 35.

22. In 1923 a low temperature of ⁻54°C was recorded in Quebec. In 1921 a high temperature of 40°C was recorded. What is the difference between the high and the low temperature?
    - Ⓐ 14°C
    - Ⓑ ⁻14°C
    - Ⓒ 94°C
    - Ⓓ ⁻94°C

23. There are 120 calories in 1 cup of low-fat milk. Adrienne drank 2 cups of milk and ate 2 slices of toast. This was a total of 435 calories. Which expression could be used to find the number of calories in 1 slice of toast?
    - Ⓐ $435 - 120 \div 2$
    - Ⓑ $(435 \div 2) + 120$
    - Ⓒ $(435 - 120) \div 2$
    - Ⓓ $\dfrac{435 - (2 \times 120)}{2}$

24. What is the value of point A?

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

25. Study the input-output chart. What are the missing numbers?

Input	Output
3	8
4	11
10	29
5	?
?	20
20	?

    - Ⓐ 13, 6, 60
    - Ⓑ 14, 7, 59
    - Ⓒ 11, 15, 40
    - Ⓓ 19, 13, 39

✋ **STOP**

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