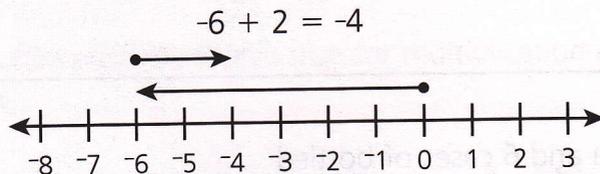


To **add integers** with like signs, **add** the absolute values and give the sum the same sign as the addends.

$$5 + 8 = 13 \qquad -5 + -8 = -13$$

If the addends have different signs, **subtract** the absolute values and give the difference the same sign as the addend with the **larger** absolute value.



To **subtract integers**, first **add** the **opposite** of the number. Then follow the process used to add integers.

$$4 - 6 = 4 + (-6) = -2 \qquad 4 - (-6) = 4 + 6 = 10$$

$$-4 - 6 = -4 + (-6) = -10 \qquad -4 - (-6) = -4 + 6 = 2$$

Integers are the positive whole numbers, their negative opposites, and 0.

The **absolute value** of a number is its distance from 0. It is **always** positive.

$$|-8| = 8 \qquad |8| = 8$$

The opposite of a number is its **additive inverse**.

15 and -15 are additive inverses.

Read each problem. Circle the letter of the best answer.

- 1** Ivan had -24 points at the start of the second level in a game. At the end of the second level, Ivan had -13 points. How many points did Ivan score in the second level of this game?

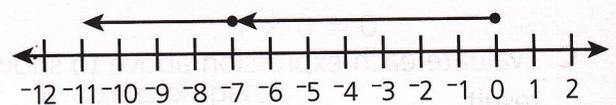
- A** -37 **C** +11
B -11 **D** +37

Set up an expression that subtracts the points at the start of the level from the points at the end of the level: $-13 - (-24)$. To subtract integers, add the opposite of the number: $-13 + (+24) = +11$. The correct answer is C.

- 2** What is the sum of 18 and -43?

- A** -61 **C** 25
B -25 **D** 61

- 3** Which equation is modeled using the number line below?



- A** $7 - 4 = -11$
B $-7 - 4 = -11$
C $7 - (-4) = -11$
D $-7 - (-4) = -11$

- 4** At 8:00 A.M., the temperature was -5°F . By noon, the temperature dropped another 3°F . What was the temperature at noon?

- A** -8°F **C** 2°F
B -2°F **D** 8°F

Read each problem. Write your answers.

5 Look at the expression below.

$$25 - (-14)$$

A What is the value of this expression?

Answer: _____

B Explain how you found your answer.

6 Look at the expression below.

$$-9 - 13$$

A Rewrite this expression as the sum of two integers. Be sure the value of each expression is the same.

Answer: _____

B What is the value of both expressions?

Answer: _____

C Explain how you know your answer is correct.
