Name _____   Date _____

Explore the Number Line: Play Answer Sheet

Selected-Response Items—Indicate the letter(s) only.

1. _____   2. _____   3. _____

4. _____   5. _____

Fill-in-the-Blank and Graphing Items

6. (a)_____   7. (a)_____   8. (a)_____

   (b)_____   (b)_____   (b)_____

   (c)_____   (c)_____   (c)_____

9. _____   10. _____   11. _____

12. (a)_____   13. (a)_____

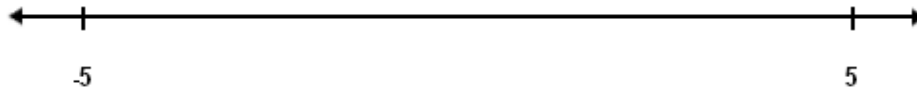   (b)_____   (b)_____
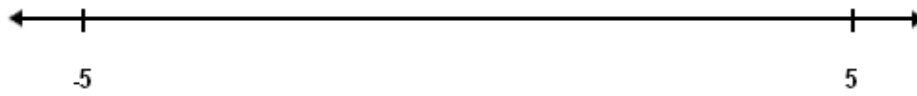
    (c)_____   (c)_____

    (d)_____   (d)_____

    (e)_____

14.

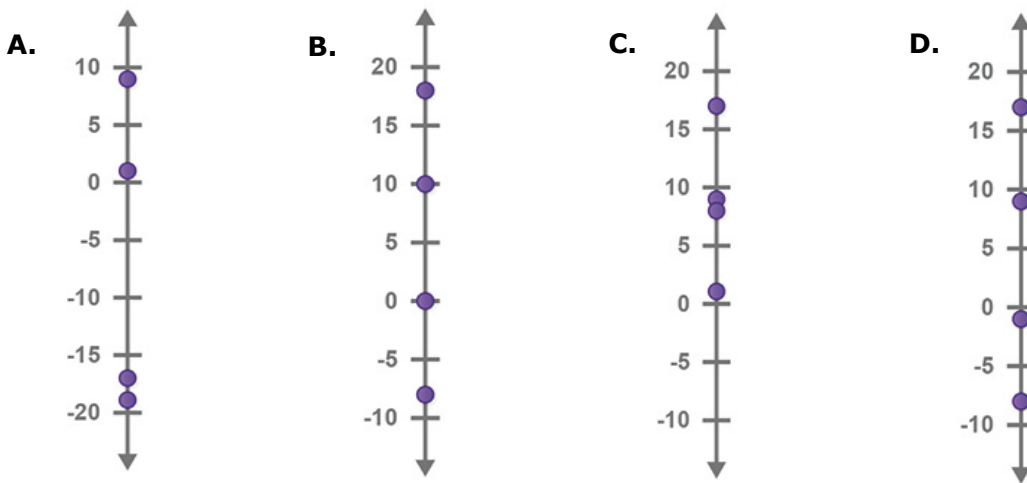**15.**

Explore the Number Line: Play

Number of Questions: 15

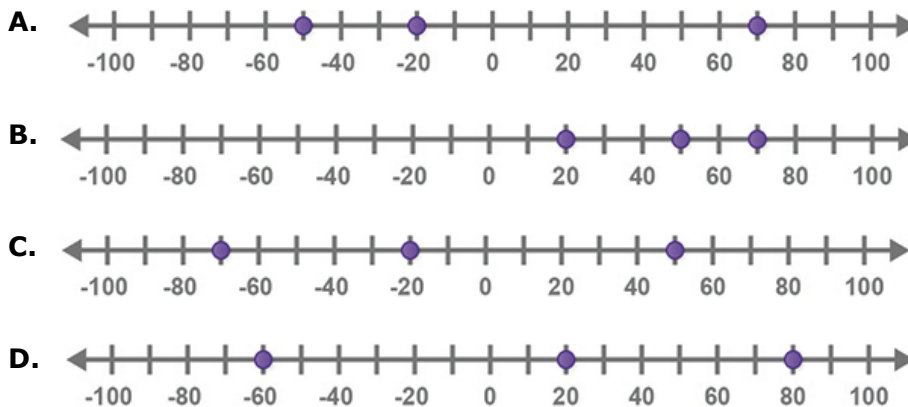**Questions 1–5 are selected-response questions. Write the letters of the correct answers on the answer sheet.**

1. Which change or changes in population could be represented by a negative number? *Select all that apply.*

   A. Town A lost 450 people.

   B. Town B's population decreased by 136 people.

   C. Town C gained 812 people.

   D. Town D's population increased by 714 people.

   E. Town E had no change in population.

   F. Town F had a decline of 359 people.

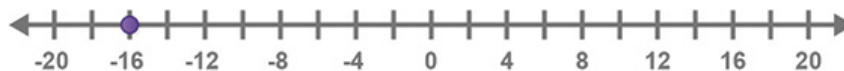2. Identify the vertical number line with points at –8, –1, 9, and 17.

   A. **B.** **C.** **D.**

3. Identify the horizontal number line with points at –50, –20, and 70.

   A.

   B.

   C.

   D.

4. What is the opposite of the opposite of 7?

    A. 1   **B.** −7   **C.** 0   **D.** 7

5. What is the opposite of the point shown on the number line?

    A. −16   **B.** 0   **C.** 1   **D.** 16

Questions 6–15 are fill-in-the-blank questions. Write the correct answers in the spaces provided on the answer sheet.

6. For each number below, give the number that is an equal distance from zero in the opposite direction.

The opposite of 2 is **(a)**_____.

The opposite of 13 is **(b)**_____.

The opposite of −25 is **(c)**_____.

7. Classify the following real-world situations by whether they could be written with a positive number, negative number, or neither.

    A. 500 meters below sea level   **B.** a mountain elevation of 3,214 feet

    C. sea level   **D.** the boiling point of water

    E. $10°$ below 0   **F.** debt of $500

Positive number: **(a)**_____

Negative number: **(b)**_____

Neither positive nor negative: **(c)**_____

8. Write a positive or negative number that meets each condition given.

A number that lies between the opposite of zero and the opposite of −2: **(a)**_____

A number that has an opposite between 6 and 10: **(b)**_____

A number that is its own opposite: **(c)**_____

9. What is the opposite of −8? _____

10. Place the elevations in order from least elevation to greatest elevation.

Least elevation to greatest elevation: _____

    A. 20,000 feet below sea level   **B.** at sea level

    C. 5,000 feet above sea level   **D.** 30,000 feet above sea level

    E. 8,000 feet below sea level   **F.** 15,000 feet below sea level

11. Think about how each transaction would affect the balance of a bank account.

Place the deposits and withdrawals in order from greatest value to least value.

Greatest value to least value: _____

A. deposit of $803	**B.** withdrawal of $71
C. withdrawal of $104	**D.** withdrawal of $211
E. deposit of $407	**F.** withdrawal of $109

12. Write a number that can be used to represent the following situation.

A debt of $150: **(a)**_____

Climbing to an elevation of 3,230 feet: **(b)**_____

Diving in the ocean 123 meters: **(c)**_____

Temperature of 212 degrees Fahrenheit: **(d)**_____

Temperature of $10°$ below 0: **(e)**_____

13. Use what you know about positive numbers, negative numbers, and their opposites to complete the sentences. *Select from answer choices below each sentence or phrase.*

The opposite of a positive number is a **(a)**_____.
   A. positive number   **B.** negative number.

The opposite of a **(b)**_____will always be ...
   A. positive number   **B.** negative number

(c)_____ the opposite of a negative number.
   A. greater than   **B.** less than   **C.** equal to

The opposite of zero is **(d)**_____ the opposite of a positive number.
   A. greater than   **B.** less than   **C.** equal to

Questions 14 and 15 are graphing questions. Graph the correct answers on the number lines provided on the answer sheet.

14. Partition the number line on the answer sheet in such a way that you can place points. Once you have partitioned the line, place a marker on the following four points:

- The opposite of −3
- The opposite of 4
- The opposite of 0
- The opposite of the opposite of 2

15. Partition the number line on the answer sheet.

Then, place the following points and their opposites: 3, −5, −1, and 2.