

Name _____

Date _____

Investigate Rational Numbers: Play Answer Sheet

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

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

9. _____

10. _____

Fill-in-the-Blank Items

11. _____

12. _____

13. _____

14. (a) _____

15. (a) _____

(b) _____

(b) _____

(c) _____

(c) _____

Investigate Rational Numbers: Play

Number of Questions: 15

Questions 1–10 are selected-response questions. Write the letters of the correct answers on the answer sheet.

1. Which of the following are equivalent to positive one-half?

Select all that apply.

- A. 0.2 B. $2 \div \frac{2}{1}$ C. 0.5 D. $\frac{4}{8}$ E. $\frac{12}{6}$

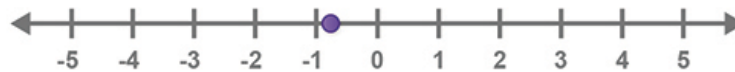
2. Which numbers meet the following two conditions?

- Can be written in the form of a fraction
- Is positive

Select all that apply.

- A. 0.4 B. -6 C. $-\frac{2}{8}$ D. 8 E. none of these

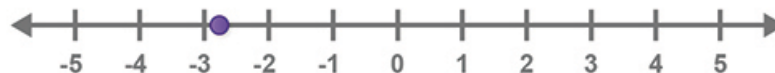
3. Look at the number line.



Which value is closest to the point on the number line?

- A. 0 B. -1 C. $-\frac{3}{2}$ D. $-\frac{1}{5}$

4. Look at the number line.



Which number does the point on the number line best represent?

- A. $-\frac{11}{4}$ B. -2.25 C. $-\frac{5}{2}$ D. -3.25

5. A type of cell phone can operate effectively between -40°F and 120°F .

Which temperature is outside the cell phone's effective operating range?

- A. 0°F B. 100°F C. -30°F D. -50°F

6. The water level of a river changed -0.25 inch on Monday, -0.1 inch on Tuesday, -0.4 inch on Wednesday, and -0.35 inch on Thursday.

On which day of the week did the water level change least?

- A. Monday B. Tuesday C. Wednesday D. Thursday

7. Sort the following set of numbers from least to greatest.

$$\left\{ \frac{10}{3}, 3, -0.275, 0, -\frac{1}{3} \right\}$$

A. $\left\{ -0.275, -\frac{1}{3}, 0, \frac{10}{3}, 3 \right\}$

B. $\left\{ -\frac{1}{3}, -0.275, 0, \frac{10}{3}, 3 \right\}$

C. $\left\{ -0.275, -\frac{1}{3}, 0, 3, \frac{10}{3} \right\}$

D. $\left\{ -\frac{1}{3}, -0.275, 0, 3, \frac{10}{3} \right\}$

8. Which set of numbers is in order from least to greatest?

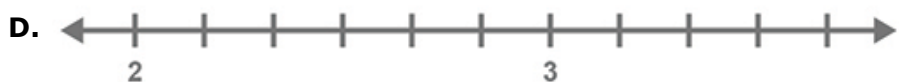
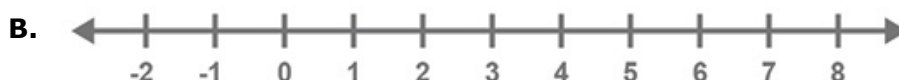
A. $\left\{ -4, -\frac{1}{10}, -1, 2, 2.75 \right\}$

B. $\left\{ -\frac{9}{7}, -\frac{11}{10}, 0, 0.02, 0.20 \right\}$

C. $\left\{ -3, -3.5, -2.3, -1, 0 \right\}$

D. $\left\{ -\frac{3}{2}, -\frac{5}{2}, 0, \frac{2}{5}, \frac{2}{3} \right\}$

9. Which number line should be used to most accurately show $2\frac{5}{6}$?



10. Which numbers are opposite pairs? *Select all that apply.*

A. $-\frac{1}{2}, -1$

B. $1.5, -1.5$

C. $-\frac{7}{4}, \frac{7}{4}$

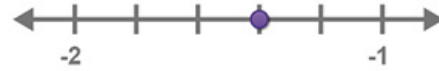
D. $-4\frac{1}{4}, 5\frac{1}{4}$

E. $-6, \frac{1}{6}$

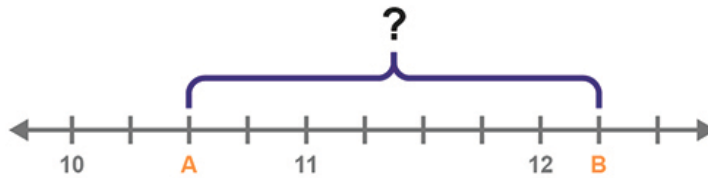
Questions 11–15 are fill-in-the-blank questions. Write the correct answers in the spaces provided on the answer sheet.

11. Look at the number line.

Assuming the lines are evenly spaced between the integers, what number, in decimal notation, is represented by the plotted point?



12. Look at the number line. Find the length of each interval to help solve the problem.



What is the distance from point A to point B? Write your answer in decimal form.

13. A certain number line uses 20 spaces between consecutive integers.

What is the distance between two consecutive tick marks?
Express the answer in decimal form.

14. Examine the set of numbers below.

$$\{-4, -3.75, -2.5, -3, -4.25, -4.75, -2\}$$

Identify the number that is closest to zero, the number that is farthest from zero, and the number that is the middle value when the numbers are ordered from least to greatest.

Closest to 0: (a) _____

Farthest from 0: (b) _____

Middle value: (c) _____

15. Examine the set of numbers below.

$$\{-15, -8.5, -1.8\}$$

Determine each number's distance from zero.

-15 is (a) _____ less than zero.

-8.5 is (b) _____ less than zero.

-1.8 is (c) _____ less than zero