



Interpret real numbers in context

- 1 Select the description that matches a natural number

Natural Number

- A A non-negative integer (0, 1, 2, 3, ...).
- B A real number that cannot be expressed as a simple fraction (e.g., $\sqrt{2}$, π).
- C Any number that can be expressed as a fraction of two integers (e.g., $1/2$, $-3/4$, 5).
- D A positive integer (1, 2, 3, ...).

- 2 Select the description that matches this symbol

 $\mathbb{Q}$

- A A positive integer (1, 2, 3, ...).
- B Any number that can be found on the number line, including both rational and irrational numbers.
- C A real number that cannot be expressed as a simple fraction (e.g., $\sqrt{2}$, π).
- D Any number that can be expressed as a fraction of two integers (e.g., $1/2$, $-3/4$, 5).

- 3 Select the set that means a natural number

Natural Number

- A $\{x \mid x \in \mathbb{N}\}$
- B $\{x \mid x \in \mathbb{R}, x \notin \mathbb{Q}\}$
- C $\{x \mid x \in \mathbb{W}\}$
- D $\{x \mid x \in \mathbb{Q}\}$

- 4 What type of number does this set definition represent

$$\{x \mid x \in \mathbb{R}, x \notin \mathbb{Q}\}$$

- A Natural Number
- B Rational Number
- C Irrational Number
- D Whole Number

- 5 Select the description of the highlighted grouping



- A Any number that can be expressed as a fraction of two integers (e.g., $1/2$, $-3/4$, 5).
- B Any number that can be found on the number line, including both rational and irrational numbers.
- C A non-negative integer (0, 1, 2, 3, ...).
- D A real number that cannot be expressed as a simple fraction (e.g., $\sqrt{2}$, π).

- 6 Select the description that matches this set definition

$$\{x \mid x \in \mathbb{R}, x \notin \mathbb{Q}\}$$

- A Any number that can be found on the number line, including both rational and irrational numbers.
- B A real number that cannot be expressed as a simple fraction (e.g., $\sqrt{2}$, π).
- C A non-negative integer (0, 1, 2, 3, ...).
- D Any number that can be expressed as a fraction of two integers (e.g., $1/2$, $-3/4$, 5).

- 7 Put these numbers in order from smallest to largest.

1.8, 1.7, 2.05

- A 2.05, 1.7, 1.8
- B 1.8, 2.05, 1.7
- C 1.8, 1.7, 2.05
- D 1.7, 1.8, 2.05

- 8 Which number is between 2 and 3?

A $\frac{3}{2}$

B $\frac{11}{5}$

C $\frac{8}{5}$



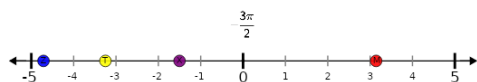
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9 Put these numbers in order from smallest to largest.

2.32, $2.\overline{16}$, 2

A	2.32, 2, $2.\overline{16}$
B	$2.\overline{16}$, 2, 2.32
C	$2.\overline{16}$, 2.32, 2
D	2, $2.\overline{16}$, 2.32

10 Which dot is at this value?



- A M
- B T
- C X
- D Z

11 Select the narrowest description that matches this number type

$$\frac{0}{12}$$

- A A non-negative integer (0, 1, 2, 3, ...).
- B A positive integer (1, 2, 3, ...).
- C A real number that cannot be expressed as a simple fraction (e.g., $\sqrt{2}$, π).

12 Which number is between 1 and 2?

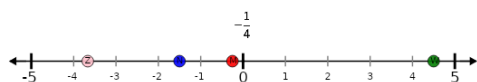
A $\sqrt[3]{2}$	B $\sqrt{5}$
C $\sqrt[3]{9}$	

13 Compare the two numbers. Is the first less than, equal to, or greater than the second?

$$\frac{19}{9} \quad \bigcirc \quad -2.27$$

- | | |
|-----|-----|
| A = | B > |
| C < | |

14 Which dot is at this value?



- A Z
- B W
- C N
- D M

15 Select the narrowest set definition that matches this number type

$$\sqrt{61}$$

- A $\{x \mid x \in \mathbb{Q}\}$
- B $\{x \mid x \in \mathbb{R}, x \notin \mathbb{Q}\}$
- C $\{a + bi \mid a, b \in \mathbb{R}\}$



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- 16** Classify this number as natural, whole, integer, rational or irrational. Pick the narrowest definition that fits.

7

A Irrational Number

B Natural Number

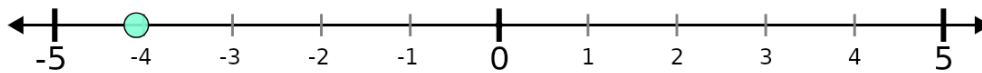
- 17** Which number is between -5 and -4?

A $-\sqrt{23}$

B $-\frac{4}{5}\pi$

C -2π

- 18** What number is this dot at?



A $-\frac{5\sqrt{6}}{3}$

B $\frac{6}{4}$

C $2\sqrt{3}$

- 19** Select the number that is a rational number

Rational Number

A $\sqrt{13}$

B $\sqrt{83}$

C $-\frac{8}{12}$