LESSON MAKER PRO

Rational Number Trek

Compare, order, and interpret positive and negative rational numbers.

GRADE 6 · 6.NS.C

CCSS.Math.Content.6.NS.C "Apply and extend previous understandings of numbers to the system of rational numbers."

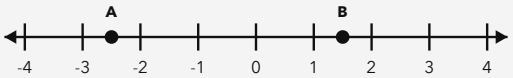
NAME _____ DATE _____

COMPARE RATIONAL NUMBERS

To compare rational numbers, place or imagine them on a number line. The number farther right is greater. Absolute value tells a number's distance from zero, so it is never negative.

WORKED EXAMPLE

Use the number line to compare -2.5 and 1.5. Write <, >, or =.

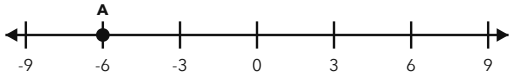


1. Point A is at -2.5, and point B is at 1.5.
2. Point A is to the left of point B.
3. A number to the left is less than a number to the right.

Answer: -2.5 < 1.5

PRACTICE 6 problems

1 What rational number is shown by point A on the number line?



ANSWER _____

2 Which number is greater: -5/8 or -3/4?

ANSWER _____

3 Write the opposite of 7/9.

ANSWER _____

4 Find |-13/5|.

ANSWER _____

5 Order these numbers from least to greatest: 1.2, -1.02, 0, -1.2.

ANSWER _____

6 Which number is farthest from zero: -1.6, 5/4, or 7/5?

ANSWER _____

APPLY IT Show your work

1 In a video game ranking, Talia has -2.4 points and Andre has -2.75 points. Whose score is greater? By how many points?

WORK SPACE

ANSWER _____

2 Two hikers check their elevations relative to sea level. Sam is at -3.5 meters, and Jo is at -1.75 meters. Who is closer to sea level? How much closer is that hiker?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Order -7/8, -0.81, and -5/6 from least to greatest. Explain how you know.

WORK SPACE AND ANSWER

ANSWER KEY

Rational Number Trek

GRADE 6 · 6.NS.C

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What rational number is shown by point A on the number line?	**-6**
2	Which number is greater: -5/8 or -3/4?	**-5/8**
3	Write the opposite of 7/9.	**-7/9**
4	Find |-13/5|.	**13/5**
5	Order these numbers from least to greatest: 1.2, -1.02, 0, -1.2.	**-1.2, -1.02, 0, 1.2**
6	Which number is farthest from zero: -1.6, 5/4, or 7/5?	**-1.6**

PART 2 · APPLY IT

1. **Talia's score is greater by 0.35 point.** -2.4 is greater because it is closer to zero. The difference is -2.4 - (-2.75) = 0.35.
2. **Jo is closer to sea level by 1.75 meters.** Sam is 3.5 meters from zero, while Jo is 1.75 meters from zero. The difference in distances is 3.5 - 1.75 = 1.75.

CHALLENGE

-7/8, -5/6, -0.81. Since -7/8 = -0.875 and -5/6 is about -0.833, -7/8 is farthest left, then -5/6, then -0.81.

Accept equivalent fraction or decimal forms when they name the same value. For ordering and comparison, accept correct reasoning based on positions relative to zero or on a number line.