LESSON MAKER PRO

Rational Number Rankings

Compare fractions and decimals, even below zero.

GRADE 6 · 6.NS.C

6.NS.C "Apply knowledge of the number system to represent and use rational numbers in a variety of forms."

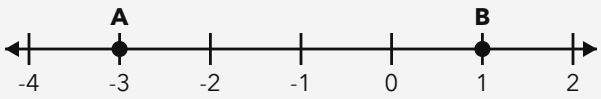
NAME _____ DATE _____

COMPARE ON A NUMBER LINE

A number farther right on a number line is greater. To compare a fraction and a decimal, first write them in the same form.

WORKED EXAMPLE

Use the number line to compare -3 and 1.



1. A marks -3, and B marks 1.
2. A is left of B, so -3 < 1.

Answer: -3 < 1

PRACTICE 4 problems

1 Which is greater, -0.6 or -3/4?

ANSWER _____

2 Compare -7/5 and -1.3 using <, >, or =.

ANSWER _____

3 Order -0.25, -2/3, and 0.4 from least to greatest.

ANSWER _____

4 Compare -5/8 and -0.625 using <, >, or =. Explain.

ANSWER _____

APPLY IT Show your work

1 The table shows game score changes. Who has the greatest change, and how much greater is it than the next greatest?

GAME SCORE CHANGES

Player	Points
Zuri	-0.8
Mateo	-3/5
Kai	-1.25

ANSWER _____

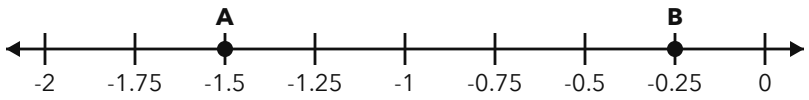
2 In a diving game, Nia is at -2.4 m and Leo is at -11/4 m. Who is closer to sea level, and by how much?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Find the number halfway between A and B. Write it as a fraction and a decimal. Explain your reasoning.



WORK SPACE AND ANSWER

ANSWER KEY

Rational Number Rankings

GRADE 6 · 6.NS.C

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Which is greater, -0.6 or -3/4?	**-0.6**
2	Compare -7/5 and -1.3 using <, >, or =.	**-7/5 < -1.3**
3	Order -0.25, -2/3, and 0.4 from least to greatest.	**-2/3, -0.25, 0.4**
4	Compare -5/8 and -0.625 using <, >, or =. Explain.	**-5/8 = -0.625 because 5/8 = 0.625.**

PART 2 · APPLY IT

1. **Mateo, by 0.2 points** Mateo's change is -0.6 points, which is greater than Zuri's -0.8 points. The difference is 0.2 points.
2. **Nia, by 0.35 m** Leo is at -2.75 m. Nia's depth is closer to zero, and 2.75 - 2.4 = 0.35 m.

CHALLENGE

-7/8 and -0.875. The average of -1.5 and -0.25 is (-1.5 + -0.25)/2 = -0.875.

Accept equivalent fractions or decimals when they give the requested comparison or value. For the challenge, accept any correct explanation that finds the midpoint.