

Compare It Clearly

Use symbols, number lines, and words to compare rational numbers.

GRADE 6 • TEKS 6.1.D

6.1.D "communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;"

NAME _____

DATE _____

SHOW WHAT YOU KNOW

To compare rational numbers, use a number line or rewrite the values in the same form. The greater number is farther right, and for negative numbers, the value closer to zero is greater. Show your thinking with a comparison symbol and a sentence.

WORKED EXAMPLE

Use the number line to compare C and D. Write a symbol statement and a sentence.

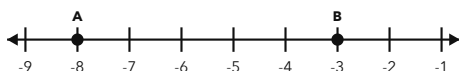


1. Point C is at 2, and point D is at 5.
2. The point farther right is greater.
3. Since 2 is left of 5, write $2 < 5$.

Answer: $C < D$. C is less than D.

PRACTICE 5 problems

- 1** Use the number line. Write a comparison symbol statement for A and B. Then write a sentence telling which point is greater.



ANSWER _____

- 2** Write an equation showing whether -0.75 and $-3/4$ are equal.

ANSWER _____

- 3** Order $7/8$, 0.9 , and $6/7$ from least to greatest. Use $<$ symbols.

ANSWER _____

- 4** At a climbing gym, one wall is 14.8 m high. Another wall is $14 \frac{7}{10}$ m high. Which wall is higher? Write a comparison.

ANSWER _____

- 5** Write the symbol statement for this sentence: Negative $1 \frac{1}{4}$ is less than negative 1.1 .

ANSWER _____

APPLY IT Show your work

- 1** In a racing game, Jada's time change was -3.4 seconds. Leo's time change was $-3\frac{3}{8}$ seconds. Whose time decreased more? Write a comparison and a sentence.

WORK SPACE

ANSWER _____

- 2** Maya saved \$8.75 for headphones. Omar saved $\$8\frac{3}{4}$. Did they save the same amount? Write an equation and a sentence.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Order $-\frac{3}{4}$, -0.7 , $-\frac{4}{6}$, and -0.58 from least to greatest. Then explain in one sentence how you checked your order.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Use the number line. Write a comparison symbol statement for A and B. Then write a sentence telling which point is greater.	$-8 < -3$. B is greater than A.
2	Write an equation showing whether -0.75 and $-3/4$ are equal.	$-0.75 = -3/4$
3	Order $7/8$, 0.9 , and $6/7$ from least to greatest. Use $<$ symbols.	$6/7 < 7/8 < 0.9$
4	At a climbing gym, one wall is 14.8 m high. Another wall is $14\frac{7}{10}$ m high. Which wall is higher? Write a comparison.	$14.8 > 14\frac{7}{10}$. The 14.8 m wall is higher.
5	Write the symbol statement for this sentence: Negative $1\frac{1}{4}$ is less than negative 1.1 .	$-1\frac{1}{4} < -1.1$

PART 2 • APPLY IT

- $-3.4 < -3\frac{3}{8}$. Jada's time decreased more.** Rewrite $-3\frac{3}{8}$ as -3.375 . Since -3.4 is less than -3.375 , Jada had the greater decrease.
- $\$8.75 = \$8\frac{3}{4}$. They saved the same amount.** Convert $3/4$ to 0.75 . Both amounts are $\$8.75$.

CHALLENGE

$-3/4 < -0.7 < -4/6 < -0.58$. I converted $-3/4$ to -0.75 and $-4/6$ to about -0.667 , then placed the numbers from most negative to least negative.

Accept equivalent fraction, decimal, or comparison forms. For written responses, accept any accurate sentence that correctly explains the comparison.