

Rational Number Lineup

Put positive and negative rational numbers in order.

GRADE 6 • TEKS 6.2.D

6.2.D "order a set of rational numbers arising from mathematical and real-world contexts; and"

NAME _____

DATE _____

COMPARE POSITIONS

To order rational numbers, compare their positions on a number line. Numbers farther left are smaller, and numbers farther right are greater. Rewrite fractions or mixed numbers as decimals when that makes comparison easier.

WORKED EXAMPLE

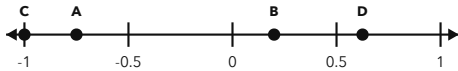
Order -1.5 , $1/4$, and 0.6 from least to greatest.

1. Write $1/4$ as 0.25 .
2. Compare -1.5 , 0.25 , and 0.6 .
3. Place the numbers from left to right on a number line.

Answer: -1.5 , $1/4$, 0.6

PRACTICE 6 problems

- 1** Use the number line. List points A, B, C, and D from least to greatest.



ANSWER _____

- 2** Order -0.8 , $7/10$, $-1/4$, and $1/2$ from least to greatest.

ANSWER _____

- 3** Order $-2 \frac{1}{3}$, -2.4 , $-2 \frac{1}{4}$, and -2.35 from least to greatest.

ANSWER _____

- 4** Order $3/8$, -0.45 , 0 , and $-1/2$ from greatest to least.

ANSWER _____

- 5** Order 1.05 , $1 \frac{1}{10}$, 1.005 , and 1.5 from least to greatest.

ANSWER _____

- 6** Order $-5/6$, -0.83 , $-7/8$, and -0.805 from least to greatest.

ANSWER _____

APPLY IT Show your work

- 1** In an arcade tournament, each player's score change in one round is shown. Order the players from the lowest score change to the highest score change.

ARCADE SCORE CHANGES

Player	Score Change
Jada	$-1\frac{1}{4}$
Mateo	-1.2
Priya	$-1\frac{1}{10}$
Omar	-1.05

WORK SPACE

ANSWER _____

- 2** A coding club tests four robots on a straight track. Their final positions, in meters from the start, are Riko: -2.6 , Sol: $-2\frac{1}{2}$, Tia: 0.35 , and Uma: $\frac{2}{5}$. Order the robots from leftmost to rightmost.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Order $-1\frac{3}{8}$, -1.4 , $-1\frac{1}{8}$, -1.35 , $-\frac{7}{5}$, and $-1\frac{1}{3}$ from least to greatest. Use $=$ for values that are equal, then explain how you found the equal values.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Use the number line. List points A, B, C, and D from least to greatest.	C, A, B, D
2	Order -0.8, $\frac{7}{10}$, $-\frac{1}{4}$, and $\frac{1}{2}$ from least to greatest.	-0.8, $-\frac{1}{4}$, $\frac{1}{2}$, $\frac{7}{10}$
3	Order $-2\frac{1}{3}$, -2.4, $-2\frac{1}{4}$, and -2.35 from least to greatest.	-2.4, -2.35, $-2\frac{1}{3}$, $-2\frac{1}{4}$
4	Order $\frac{3}{8}$, -0.45, 0, and $-\frac{1}{2}$ from greatest to least.	$\frac{3}{8}$, 0, -0.45, $-\frac{1}{2}$
5	Order 1.05, $1\frac{1}{10}$, 1.005, and 1.5 from least to greatest.	1.005, 1.05, $1\frac{1}{10}$, 1.5
6	Order $-\frac{5}{6}$, -0.83, $-\frac{7}{8}$, and -0.805 from least to greatest.	$-\frac{7}{8}$, $-\frac{5}{6}$, -0.83, -0.805

PART 2 • APPLY IT

1. **Jada, Mateo, Priya, Omar** Rewrite the values as -1.25, -1.2, -1.1, and -1.05. Order them from the most negative value to the least negative value.
2. **Riko, Sol, Tia, Uma** Rewrite $-2\frac{1}{2}$ as -2.5 and $\frac{2}{5}$ as 0.4. Then order the positions from least to greatest.

CHALLENGE

$-1.4 = -\frac{7}{5} < -1\frac{3}{8} = -\frac{11}{8} < -1.35 < -1\frac{1}{3}$. Converting to decimals shows that $-\frac{7}{5}$ equals -1.4 and $-\frac{11}{8}$ equals -1.375, which is also $-1\frac{3}{8}$.

Accept equivalent fractions, decimals, or mixed numbers when they keep the correct order. For the challenge, accept any accurate explanation that identifies both equal pairs.