LESSON MAKER PRO

Rational Number Rankings

Compare signed numbers in real situations.

GRADE 6 · 6.NS.C.7b

CCSS.Math.Content.6.NS.C.7b "Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write -3 o C > -7 o C to express the fact that -3 o C is warmer than -7 o C."

NAME _____ DATE _____

THE BIG IDEA

On a number line, a number farther right is greater. For negative numbers, the number closer to 0 is greater. Rewrite fractions or decimals when needed so you can compare them.

WORKED EXAMPLE

Two weather sensors read -2/3 C and -0.7 C. Which reading is warmer?

1. Rewrite -0.7 as -7/10.
2. Use a denominator of 30: -2/3 = -20/30 and -7/10 = -21/30.
3. Since -20/30 > -21/30, -2/3 > -0.7.

Answer: -2/3 C > -0.7 C, so -2/3 C is warmer.

PRACTICE 6 problems

1 Write <, >, or =. -4.2 __ -4.7

ANSWER _____

2 A bank account changes by -3/5 dollar one day and -1/2 dollar another day. Write an order statement. Which change is the smaller loss?

ANSWER _____

3 Write <, >, or =. -7/8 __ -3/4

ANSWER _____

4 A thermometer shows 0 C at one time and -0.06 C later. Write an order statement. Which temperature is warmer?

ANSWER _____

5 Write <, >, or =. -1 1/3 __ -1.25

ANSWER _____

6 One runner is at an elevation of 2.4 m. A second runner is at 2 3/10 m. Write an order statement. Which runner is higher?

ANSWER _____

APPLY IT Show your work

1 In an online game, Mei's team has a score change of -12.5 points. Leo's team has a score change of -12 3/4 points. Write an order statement and explain which team lost fewer points.

WORK SPACE

ANSWER _____

2 At a winter sports event, one ice sensor reads -4.25 C and another reads -4 1/5 C. Write an order statement and explain which reading is warmer.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Four divers are below the water's surface at these elevations: -2.15 m, -2 1/10 m, -2.05 m, and -2 1/4 m. List the elevations from greatest to least. Then name the diver closest to the surface and explain why.

_____

_____

ANSWER KEY

Rational Number Rankings

GRADE 6 · 6.NS.C.7b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write <, >, or =. -4.2 __ -4.7	**-4.2 > -4.7**
2	A bank account changes by -3/5 dollar one day and -1/2 dollar another day. Write an order statement. Which change is the smaller loss?	**-3/5 < -1/2, so -1/2 dollar is the smaller loss.**
3	Write <, >, or =. -7/8 __ -3/4	**-7/8 < -3/4**
4	A thermometer shows 0 C at one time and -0.06 C later. Write an order statement. Which temperature is warmer?	**0 C > -0.06 C, so 0 C is warmer.**
5	Write <, >, or =. -1 1/3 __ -1.25	**-1 1/3 < -1.25**
6	One runner is at an elevation of 2.4 m. A second runner is at 2 3/10 m. Write an order statement. Which runner is higher?	**2.4 m > 2 3/10 m, so the runner at 2.4 m is higher.**

PART 2 · APPLY IT

1. **-12.5 > -12 3/4, so Mei's team lost fewer points.** -12 3/4 equals -12.75. Since -12.5 is closer to 0 than -12.75, it is greater.
2. **-4.25 C < -4 1/5 C, so -4 1/5 C is warmer.** -4 1/5 equals -4.2. Since -4.2 is greater than -4.25, it represents the warmer temperature.

CHALLENGE

-2.05 m > -2 1/10 m > -2.15 m > -2 1/4 m. The diver at -2.05 m is closest to the surface because -2.05 is closest to 0.

Accept equivalent fractions or decimals and any correct inequality statement with the numbers in the matching order. For explanations, accept language showing that a greater negative number is closer to 0.