



Ordering rational numbers

Farther right is greater

- Today: compare and order negatives, fractions and decimals together.

Which is greater: -8 or -3 ?

- No number line yet — just decide.

Turn & talk: and how sure are you?

One rule decides everything

- Whichever number sits farther **RIGHT** on the number line is greater.
- On the negative side, a bigger digit means farther LEFT — so a smaller number.

$$-3 > -8$$

- -8 is eight units left of 0; -3 is three units left.
- -3 sits to the right, so -3 is greater.

The digit measures distance, not size.

Mixed forms? Convert first.

- $-3/4$ vs $-0.6 \rightarrow -0.75$ vs -0.6
- -0.75 is farther left $\rightarrow -0.6$ is greater

Never compare a fraction to a decimal by eye.

Your turn

- Order least to greatest: $-5, 2, -1, 0$
- Thumbs up when you have it.

Debt: greater number vs bigger amount

- Owe \$50 $\rightarrow$ -50 . Owe \$20 $\rightarrow$ -20 .
- -20 is the GREATER number... but \$50 is the BIGGER debt.

Position and distance-from-zero are different questions.

Now you

- → In-class practice sheet