



Rational numbers on the number line

Every number has a place

- Today: locate negatives, fractions and decimals — and plot points on a grid.

Where does -5 go?

- Picture a number line with 0 in the middle. Now place -2 and -5 .

Turn & talk: is -5 left or right of -2 ?

Numbers increase left to right. Always.

- That rule does not stop at zero — it keeps going through the negatives.
- A bigger digit on the negative side means FARTHER LEFT, which means SMALLER.

-5 is LEFT of -2

- -5 is five units from 0; -2 is two units from 0.
- Order: -5, -2, 0, 2, 5

The negatives mirror the positives.

Fractions live between the whole numbers

- $-\frac{1}{2}$ sits halfway between -1 and 0 .
- $-\frac{9}{4} = -2.25$, between -3 and -2 .
- Convert the fraction first, then locate it.

$-\frac{9}{4}$ is NOT at -9 .

Your turn

- In which quadrant is $(-4, 3)$?
- Thumbs up when you have it.

On a grid: (x, y) — across, then up

- $(-4, 3)$: left 4, up 3 $\rightarrow$ Quadrant II
- $(3, -2)$: right 3, down 2 $\rightarrow$ Quadrant IV

Swap them and you land somewhere else entirely.

Now you

- → In-class practice sheet