Represent Rational Numbers and Their Opposites on the Number Line

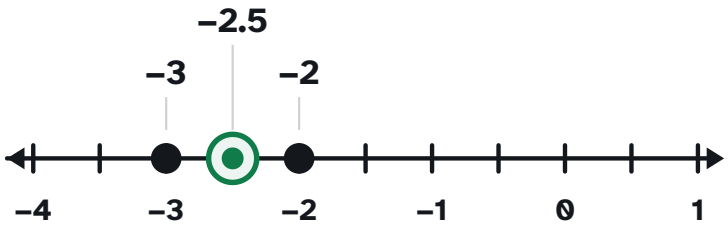
Place fractions and decimals, including negatives, on a number line.

Name _____ **Date** _____

Tonight's spark

A rec-center treasure map has a hallway number line. The floor tags show integers only. A clue says the prize is at –2.5. Where is it?

Guess first: is the prize left or right of the –2 tag?



Our class model: neighbor integers, then equal parts

Try it

Work it out on paper. Write one answer on each line.

1. **Which two integers is 2.5 between?**

   A. 1 and 2 **B.** 2 and 3 **C.** 3 and 4

   My answer _____

2. **Between which two integers is –4.5?**

   A. –4 and –3 **B.** 4 and 5 **C.** –6 and –5 **D.** –5 and –4

   My answer _____

3. **The space from 0 to 1 is split into 4 equal parts. What decimal is the 3rd mark?**

   A. 0.3 **B.** 0.75 **C.** 0.25 **D.** 0.34

   My answer _____

4 **What decimal is halfway between −3 and −2?**

A. −2.5 **B.** −3.5 **C.** −2.25 **D.** −1.5

My answer _____

5 **Write −5/2 as a decimal.**

A. −5.2 **B.** 2.5 **C.** −2.5 **D.** −0.52

My answer _____

6 **A point is 3/4 of the way from 0 to −1. Which number is it?**

A. −3/4 **B.** 3/4 **C.** −1/4 **D.** −4/3

My answer _____

Talk about it

Which two integers is it between? How many equal parts do you split the space into?

Home mission

Lay three coins in a row, going left from your hand. Call them 0, −1 and −2. Ask your student where −1.5 goes. Slide a fork there. How did your student decide?

If we get stuck, ask

- Which two integers does this number sit between?
- Into how many equal parts should we split that space?
- Can you say this number another way, as a fraction or a decimal?

Do it on a screen

Scan or type the link. Same lesson, with hints.

eduwonderlab.com/lessons/7-2/homework.html

How did it feel? (optional)

Tricky Getting there Got it