

Fraction Track

Find fractions on number lines.

GRADE 3 • 3.NF.A.2

CCSS.Math.Content.3.NF.A.2 "Understand a fraction as a number on the number line; represent fractions on a number line diagram."

NAME _____

DATE _____

COUNT EQUAL SPACES

A fraction names a point on a number line. The denominator tells how many equal spaces are between 0 and 1, and the numerator tells how many spaces to count from 0.

WORKED EXAMPLE

A number line from 0 to 1 has 9 equal spaces. Point P is at the seventh tick after 0. Write the fraction for P.

1. The whole from 0 to 1 is split into 9 equal spaces.
2. Use 9 as the denominator.
3. Count 7 spaces from 0, so use 7 as the numerator.

Answer: P = 7/9

PRACTICE 6 problems

- 1** A number line from 0 to 1 has 3 equal spaces. Point A is at the first tick after 0. Write A as a fraction.

ANSWER _____

- 2** A number line from 0 to 1 has 4 equal spaces. Which tick after 0 is $\frac{3}{4}$: first, second, or third?

ANSWER _____

- 3** Which fraction is farther to the right on a number line: $\frac{2}{6}$ or $\frac{4}{6}$?

ANSWER _____

- 4** A number line from 0 to 1 has 2 equal spaces. Point B is at the tick in the middle. Write B as a fraction.

ANSWER _____

- 5** A number line from 0 to 1 has 6 equal spaces. Write the fraction at the fifth tick after 0.

ANSWER _____

- 6** A number line from 0 to 1 has 6 equal spaces. Write the fraction at the fourth tick after 0.

ANSWER _____

APPLY IT Show your work

- 1** In a racing game, a progress meter is shown as a number line from 0 to 1. The meter has 4 equal spaces, and the car is at the third tick after 0. What fraction of the meter has the car finished?

WORK SPACE

ANSWER _____

- 2** Noah walks on a nature trail marked by a number line from 0 to 1 mile. The mile is split into 6 equal parts. He stops at the fifth mark after 0. How much of a mile has Noah walked?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A number line from 0 to 1 is split into 6 equal spaces. Point R is at $\frac{2}{6}$, and point S is at $\frac{5}{6}$. Which point is farther from 0? Explain how the number line shows this.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A number line from 0 to 1 has 3 equal spaces. Point A is at the first tick after 0. Write A as a fraction.	1/3
2	A number line from 0 to 1 has 4 equal spaces. Which tick after 0 is 3/4: first, second, or third?	third tick
3	Which fraction is farther to the right on a number line: 2/6 or 4/6?	4/6
4	A number line from 0 to 1 has 2 equal spaces. Point B is at the tick in the middle. Write B as a fraction.	1/2
5	A number line from 0 to 1 has 6 equal spaces. Write the fraction at the fifth tick after 0.	5/6
6	A number line from 0 to 1 has 6 equal spaces. Write the fraction at the fourth tick after 0.	4/6

PART 2 • APPLY IT

1. **3/4** There are 4 equal spaces, so the denominator is 4. The car is 3 spaces from 0, so the fraction is 3/4.
2. **5/6 mile** The trail has 6 equal parts, so use 6 as the denominator. Noah reaches the fifth part, so he has walked 5/6 mile.

CHALLENGE

Point S is farther from 0. Both fractions have 6 equal spaces, and 5 spaces from 0 is farther to the right than 2 spaces from 0.

Accept equivalent fraction names when the prompt does not require a specific denominator. For example, 1/2 is equivalent to 3/6, but use the named partition when students are asked to write the fraction at a tick.