

Fraction Path Finder

Count equal lengths from 0 to locate fractions.

GRADE 3 • 3.NF.A.2b

CCSS.Math.Content.3.NF.A.2b "Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line."

NAME _____

DATE _____

COUNT EQUAL PARTS

Split the distance from 0 to 1 into b equal parts. Each part has length $1/b$. Starting at 0, count a parts, and the endpoint is a/b .

WORKED EXAMPLE

Show $3/8$ on a number line from 0 to 1.

1. Draw a number line with 0 at one end and 1 at the other end.
2. Split the distance from 0 to 1 into 8 equal intervals.
3. Starting at 0, count 3 intervals to the right.
4. Label that endpoint $3/8$.

Answer: The endpoint after 3 equal intervals is $3/8$.

PRACTICE 6 problems

- 1** A number line from 0 to 1 is split into 2 equal intervals. Point A is 1 interval to the right of 0. What fraction names point A?

ANSWER _____

- 2** A number line from 0 to 1 is split into 5 equal intervals. Point B is 2 intervals to the right of 0. What fraction names point B?

ANSWER _____

- 3** A number line from 0 to 1 is split into 6 equal intervals. Point C is 4 intervals to the right of 0. What fraction names point C?

ANSWER _____

- 4** A number line from 0 to 1 is split into 7 equal intervals. Point D is 5 intervals to the right of 0. What fraction names point D?

ANSWER _____

- 5** A number line from 0 to 1 is split into 10 equal intervals. Point E is 9 intervals to the right of 0. What fraction names point E?

ANSWER _____

- 6** Each equal interval on a number line has length $1/12$. Starting at 0, you count 7 intervals. What fraction is at the endpoint?

ANSWER _____

APPLY IT Show your work

- 1** At the school fun run, Maya's lap tracker is shown as a number line from 0 to 1. The line is split into 6 equal parts, and Maya has finished 5 parts. What fraction of her lap has Maya finished?

WORK SPACE

ANSWER _____

- 2** Jay is reading a comic online. His reading meter is a number line from 0 to 1 split into 12 equal sections. The meter shows 11 sections completed. What fraction of the comic has Jay read?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A number line is marked in equal lengths of $\frac{1}{9}$. Tia says that after counting 9 lengths from 0, the endpoint is $\frac{9}{9}$. Leo says the endpoint is 1. Who is correct? Explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	A number line from 0 to 1 is split into 2 equal intervals. Point A is 1 interval to the right of 0. What fraction names point A?	1/2
2	A number line from 0 to 1 is split into 5 equal intervals. Point B is 2 intervals to the right of 0. What fraction names point B?	2/5
3	A number line from 0 to 1 is split into 6 equal intervals. Point C is 4 intervals to the right of 0. What fraction names point C?	4/6
4	A number line from 0 to 1 is split into 7 equal intervals. Point D is 5 intervals to the right of 0. What fraction names point D?	5/7
5	A number line from 0 to 1 is split into 10 equal intervals. Point E is 9 intervals to the right of 0. What fraction names point E?	9/10
6	Each equal interval on a number line has length $\frac{1}{12}$. Starting at 0, you count 7 intervals. What fraction is at the endpoint?	7/12

PART 2 • APPLY IT

1. **5/6** Each part is $\frac{1}{6}$ of a lap. Counting 5 equal parts from 0 gives an endpoint of $\frac{5}{6}$.
2. **11/12** Each section is $\frac{1}{12}$ of the comic. The endpoint after 11 sections is $\frac{11}{12}$.

CHALLENGE

Both are correct. Nine lengths of $\frac{1}{9}$ make $\frac{9}{9}$, and $\frac{9}{9}$ equals 1 whole.

Accept equivalent fractions when they name the same endpoint, such as $\frac{2}{3}$ for $\frac{4}{6}$. For the challenge, students should state that $\frac{9}{9}$ and 1 name the same point.