LESSON MAKER PRO

First Tick Fractions

Find unit fractions on number lines

GRADE 3 · 3.NF.A.14.a

3.NF.A.14.a "Represent a unit fraction (1/b) on a number line by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts as specified by the denominator."

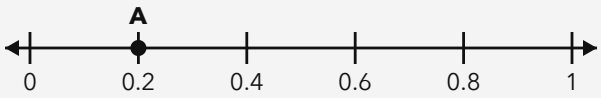
NAME _____ DATE _____

THE WHOLE LINE

The distance from 0 to 1 is one whole. Split that distance into equal parts. The first tick after 0 shows one part, so count all the parts to name its unit fraction.

WORKED EXAMPLE

What fraction is at A?



1. Find the whole from 0 to 1.
2. Count 5 equal parts in the whole.
3. A is at the end of the first part.

Answer: A is at 1/5.

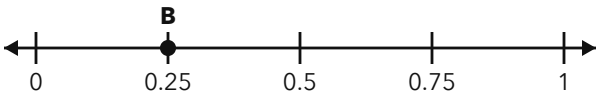
PRACTICE 6 problems

1 What unit fraction is at A?



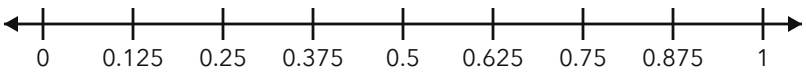
ANSWER _____

2 What unit fraction is at B?



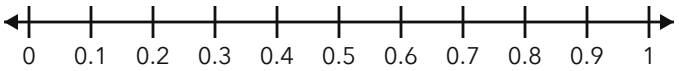
ANSWER _____

3 The first tick after 0 shows 1/___. Fill in the blank.



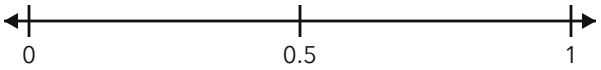
ANSWER _____

4 Count the equal parts from 0 to 1. What unit fraction does the first tick show?



ANSWER _____

5 Add marks to make 4 equal parts from 0 to 1. Label the first mark after 0 with its unit fraction.



ANSWER _____

_____

6 Which point shows 1/8, A or B?



ANSWER _____

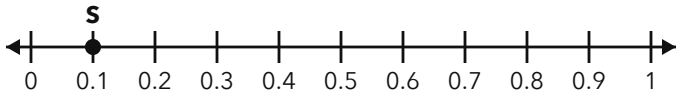
APPLY IT Show your work

1 Mia's game piece starts at 0 and moves to P on the game path. What fraction of the whole path has it traveled?



ANSWER _____

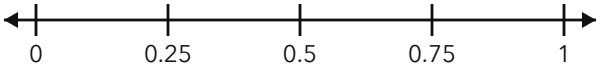
2 A video game shows its loading progress on this line. It has loaded from 0 to S. What fraction of the whole game has loaded?



ANSWER _____

CHALLENGE One step up

Split each space on the number line into 2 equal spaces. What unit fraction will the first new mark after 0 show? Explain.



WORK SPACE AND ANSWER

ANSWER KEY

First Tick Fractions

GRADE 3 · 3.NF.A.14.a

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What unit fraction is at A?	**1/2**
2	What unit fraction is at B?	**1/4**
3	The first tick after 0 shows 1/___. Fill in the blank.	**8**
4	Count the equal parts from 0 to 1. What unit fraction does the first tick show?	**1/10**
5	Add marks to make 4 equal parts from 0 to 1. Label the first mark after 0 with its unit fraction.	**Add marks at 1/4 and 3/4; label the first mark 1/4.**
6	Which point shows 1/8, A or B?	**A**

PART 2 · APPLY IT

1. **1/4** The path from 0 to 1 has 4 equal parts. P is at the end of the first part.
2. **1/10** The whole line has 10 equal parts. S is at the end of the first part.

CHALLENGE

1/8. Splitting each of the 4 equal parts in half makes 8 equal parts from 0 to 1. The first new mark shows 1/8.

For problem 5, accept a line with 4 equal parts and the first mark labeled 1/4. For the challenge, accept any explanation that shows the whole now has 8 equal parts.