

Fraction Bar Quest

Read fraction bars, then write what they show.

GRADE 3 • 3.NS.3.a.ii

3.NS.3.a.ii "Represent, name, and write a given fraction (proper or improper) or mixed number with denominators of 2, 3, 4, 5, 6, 8, and 10 using: length models (e.g., paper fraction strips, fraction bars, rods, number lines); and"

NAME _____

DATE _____

READ THE BAR

A fraction bar is split into equal parts. Count all equal parts for the denominator, then count the shaded parts for the numerator. When a whole bar is full, write the whole number and the fraction from the next bar.

WORKED EXAMPLE

Write and name the fraction shown:

[■][■][■][■][■][■][■][□][□][□]

1. Count 10 equal parts.
2. Count 7 shaded parts.
3. Write 7/10.
4. Name it seven-tenths.

Answer: 7/10, seven-tenths

PRACTICE 6 problems

1 Write the fraction shown: [■][□]

ANSWER _____

2 Name the fraction shown: [■][■][□]

ANSWER _____

3 Write the fraction shown: [■][■][■][□]

ANSWER _____

4 Write an improper fraction for the bars: [■]
[■][■][■][■][■][□][□][□][□]

ANSWER _____

5 Write a mixed number for the bars: [■][■][■]
[■][■][■][■][■][□][□][□][□]

ANSWER _____

6 Write an improper fraction for the bars: [■]
[■][■][■][■][■][■][■][■][□][□][□][□][□][□][□]

ANSWER _____

APPLY IT Show your work

- 1** Mina's game design progress bar shows one full bar and 3 shaded parts of the next bar. Each bar has 5 equal parts:  Write the progress as a mixed number.

WORK SPACE

ANSWER _____

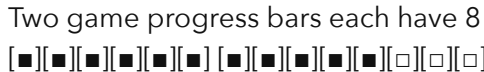
- 2** A robot's charge display shows one full bar and 4 shaded parts of the next bar. Each bar has 6 equal parts:  Write the charge as a mixed number.

WORK SPACE

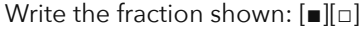
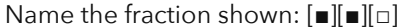
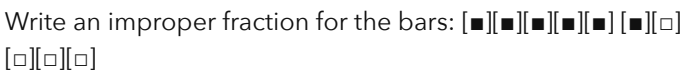
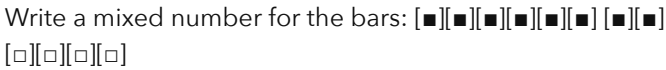
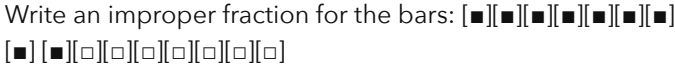
ANSWER _____

CHALLENGE One step up

CHALLENGE

Two game progress bars each have 8 equal spaces. One bar is full, and the other has 5 spaces lit:  Explain why both $\frac{13}{8}$ and $1\frac{5}{8}$ name the same amount.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write the fraction shown: 	1/2
2	Name the fraction shown: 	two-thirds
3	Write the fraction shown: 	3/4
4	Write an improper fraction for the bars: 	6/5
5	Write a mixed number for the bars: 	1 2/6
6	Write an improper fraction for the bars: 	9/8

PART 2 • APPLY IT

- 1 3/5** The first bar is 1 whole. The next bar has 3 of 5 parts shaded, so the progress is 1 3/5.
- 1 4/6** The full bar shows 1 whole. The second bar shows 4/6, so the charge is 1 4/6.

CHALLENGE

13/8 counts all 13 lit spaces. One group of 8 spaces makes 1 whole, with 5/8 left, so it is 1 5/8.

Accept equivalent forms when appropriate, such as 1 1/3 for 1 2/6. For named-fraction items, accept correct spelling or a correct fraction written with the name.