

Fraction Face-Off

Compare fraction sizes and name parts greater than one.

GRADE 3 • 3.NS.3

3.NS.3 "The student will use mathematical reasoning and justification to represent and compare fractions (proper and improper) and mixed numbers with denominators of 2, 3, 4, 5, 6, 8, and 10), including those in context. Represent, name..."

NAME _____

DATE _____

COMPARE FRACTIONS

When two fractions have the same denominator, the fraction with more parts is greater. When two fractions have the same numerator, the fraction with the smaller denominator is greater because each part is larger. You can also rename an improper fraction as a mixed number to help compare it.

WORKED EXAMPLE

Compare $\frac{5}{6}$ and $\frac{5}{10}$.

1. Both fractions have the same numerator, 5.
2. A whole split into 10 parts has smaller parts than a whole split into 6 parts.
3. Five sixths is greater than five tenths.

Answer: $\frac{5}{6} > \frac{5}{10}$

PRACTICE 6 problems

1 Write $>$, $<$, or $=$. $\frac{4}{8}$ ____ $\frac{4}{2}$

ANSWER _____

2 Write $>$, $<$, or $=$. $\frac{2}{3}$ ____ $\frac{1}{3}$

ANSWER _____

3 Write $>$, $<$, or $=$. $\frac{7}{4}$ ____ $1\frac{3}{4}$

ANSWER _____

4 A fraction bar is split into 8 equal parts. Four parts are shaded. Compare the shaded part to $\frac{1}{2}$. Write $>$, $<$, or $=$.

ANSWER _____

5 Write $\frac{7}{3}$ as a mixed number.

ANSWER _____

6 Complete the equivalent fraction. $\frac{1}{2} = \frac{\quad}{4}$

ANSWER _____

APPLY IT Show your work

- 1** In a tablet game, Priya finished $\frac{3}{4}$ of a map. Eli finished $\frac{2}{4}$ of the same-sized map. Who finished more? Write a comparison using $>$, $<$, or $=$.

WORK SPACE

ANSWER _____

- 2** Rory ran $\frac{8}{3}$ laps around a track. Write the number of laps as a mixed number.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A game board shows $1\frac{1}{4}$ points. Write $1\frac{1}{4}$ as a mixed number. Then compare it to $2\frac{2}{4}$ using $>$, $<$, or $=$. Explain how you know.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write $>$, $<$, or $=$. $4/8$ ____ $4/2$	$4/8 < 4/2$
2	Write $>$, $<$, or $=$. $2/3$ ____ $1/3$	$2/3 > 1/3$
3	Write $>$, $<$, or $=$. $7/4$ ____ $1\ 3/4$	$7/4 = 1\ 3/4$
4	A fraction bar is split into 8 equal parts. Four parts are shaded. Compare the shaded part to $1/2$. Write $>$, $<$, or $=$.	$4/8 = 1/2$
5	Write $7/3$ as a mixed number.	$2\ 1/3$
6	Complete the equivalent fraction. $1/2 =$ ____/4	$2/4$

PART 2 • APPLY IT

1. **Priya finished more. $3/4 > 2/4$.** The maps are the same size and both fractions have fourths. Three fourths is greater than two fourths.
2. **$2\ 2/3$ laps** Two whole laps are $6/3$ laps. The remaining $2/3$ lap makes $2\ 2/3$ laps.

CHALLENGE

$11/4 = 2\ 3/4$. $2\ 3/4 > 2\ 2/4$ because both numbers have 2 wholes, and $3/4$ is greater than $2/4$.

Accept comparison words in place of symbols. For problem 6, accept $2/4$ only, since the blank has a denominator of 4; for the challenge, accept a correct explanation that compares the fourths after naming $11/4$ as $2\ 3/4$.