

Fraction Face-Off

Compare fractions by thinking about equal-sized wholes.

GRADE 3 • NY-3.NF.3.d

NY-3.NF.3.d "Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons rely on the two fractions referring to the same whole. Record the results of comparisons with the symbols $>$, $=$,..."

NAME _____

DATE _____

COMPARE PARTS OF ONE WHOLE

Only compare fractions that name parts of the same-size whole. When denominators match, more equal parts means more. When numerators match, the fraction with the smaller denominator is larger because each part is larger.

WORKED EXAMPLE

Compare $\frac{3}{8}$ and $\frac{3}{4}$. Write $<$, $>$, or $=$.

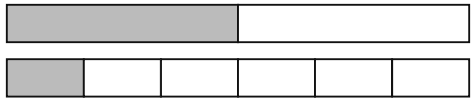


1. Both fractions have the same numerator, 3.
2. Fourth-sized parts are larger than eighth-sized parts.
3. So $\frac{3}{4}$ is larger than $\frac{3}{8}$.

Answer: $\frac{3}{8} < \frac{3}{4}$

PRACTICE 6 problems

- 1** These bars each show one whole. Write $<$, $>$, or $=$. $\frac{1}{2}$ ____ $\frac{1}{6}$



ANSWER _____

- 2** Two jars are the same size. Write $<$, $>$, or $=$, then tell why. $\frac{2}{6}$ ____ $\frac{1}{6}$

ANSWER _____

- 3** Two same-size sandwiches are cut into equal parts. Write $<$, $>$, or $=$. $\frac{1}{6}$ ____ $\frac{1}{2}$

ANSWER _____

- 4** Complete the true comparison. Write 1 or 2 in the blank. $\frac{2}{6} >$ ____/6

ANSWER _____

- 5** Write $<$, $>$, or $=$. $\frac{2}{6}$ ____ $\frac{2}{2}$

ANSWER _____

- 6** Noah says, " $\frac{1}{6}$ is greater than $\frac{1}{2}$ because 6 is greater than 2." Is Noah correct? Write the correct comparison and tell why.

ANSWER _____

APPLY IT

Show your work

- 1** Kai and Nia are filling matching game progress bars. Kai has finished $\frac{1}{6}$ of a bar. Nia has finished $\frac{1}{2}$ of a bar. Who has finished more? Write a comparison and explain.

WORK SPACE

ANSWER _____

- 2** At coding club, Luz completes $\frac{2}{6}$ of a same-length challenge. Omar completes $\frac{1}{6}$ of a same-length challenge. Who completes more? Write a comparison and explain.

WORK SPACE

ANSWER _____

CHALLENGE

One step up

Ava colored $\frac{1}{2}$ of a small poster. Ben colored $\frac{1}{6}$ of a larger poster. Can you tell who colored more poster area? Explain why or why not.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	These bars each show one whole. Write $<$, $>$, or $=$. $1/2$ ____ $1/6$	$1/2 > 1/6$
2	Two jars are the same size. Write $<$, $>$, or $=$, then tell why. $2/6$ ____ $1/6$	$2/6 > 1/6$ because two sixths is more than one sixth.
3	Two same-size sandwiches are cut into equal parts. Write $<$, $>$, or $=$. $1/6$ ____ $1/2$	$1/6 < 1/2$
4	Complete the true comparison. Write 1 or 2 in the blank. $2/6 >$ ____/6	1, so $2/6 > 1/6$
5	Write $<$, $>$, or $=$. $2/6$ ____ $2/2$	$2/6 < 2/2$
6	Noah says, " $1/6$ is greater than $1/2$ because 6 is greater than 2." Is Noah correct? Write the correct comparison and tell why.	No. $1/6 < 1/2$ because one half is a larger part than one sixth.

PART 2 • APPLY IT

- Nia has finished more. $1/6 < 1/2$ because both bars are the same size and one half is larger than one sixth.** The progress bars are matching wholes. The fractions have the same numerator, so the smaller denominator names the larger fraction.
- Luz completes more. $2/6 > 1/6$ because both challenges are the same length and two sixths is more than one sixth.** The challenges are the same-size wholes. The denominators match, so compare the numerators.

CHALLENGE

No. The fractions refer to different-size posters, so you cannot tell which colored area is bigger.

Accept correct comparison symbols and any clear reasoning about equal-sized wholes, matching denominators, or matching numerators. For the challenge, accept answers that state the comparison cannot be made because the wholes are different sizes.