

Fraction Face-Off

Compare fractions by thinking about equal parts.

GRADE 3 • 3.NF.A.3d

CCSS.Math.Content.3.NF.A.3d "Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole..."

NAME _____

DATE _____

COMPARE EQUAL PARTS

You can compare fractions only when they describe parts of the same-size whole. When the numerators are the same, the fraction with the smaller denominator is greater. When the denominators are the same, the fraction with the larger numerator is greater.

WORKED EXAMPLE

Compare $\frac{5}{8}$ and $\frac{5}{11}$.

1. The numerators are both 5.
2. With the same numerator, fewer equal parts means larger parts.
3. Because 8 is less than 11, $\frac{5}{8}$ is greater than $\frac{5}{11}$.

Answer: $\frac{5}{8} > \frac{5}{11}$

PRACTICE 6 problems

1 $\frac{2}{9}$ $\underline{\hspace{1cm}}$ $\frac{2}{6}$

ANSWER _____

2 $\frac{7}{10}$ $\underline{\hspace{1cm}}$ $\frac{3}{10}$

ANSWER _____

3 $\frac{1}{4}$ $\underline{\hspace{1cm}}$ $\frac{1}{12}$

ANSWER _____

4 $\frac{6}{7}$ $\underline{\hspace{1cm}}$ $\frac{6}{9}$

ANSWER _____

5 $\frac{4}{13}$ $\underline{\hspace{1cm}}$ $\frac{9}{13}$

ANSWER _____

6 $\frac{3}{15}$ $\underline{\hspace{1cm}}$ $\frac{3}{14}$

ANSWER _____

APPLY IT Show your work

- 1** Mia and Devon each have an equal-sized brownie. Mia eats $\frac{4}{7}$ of her brownie. Devon eats $\frac{4}{9}$ of his brownie. Who eats more? Write a comparison sentence.

WORK SPACE

ANSWER _____

- 2** Two equal-sized garden plots are ready for planting. Noah plants flowers in $\frac{2}{12}$ of his plot. Elena plants flowers in $\frac{9}{12}$ of her plot. Who plants flowers in more of a plot? Write a comparison sentence.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Rosa eats $\frac{1}{2}$ of a small pizza. Kai eats $\frac{1}{2}$ of a large pizza. Can you use $>$, $=$, or $<$ to compare the amounts they eat? Explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$2/9$ ___ $2/6$	$2/9 < 2/6$
2	$7/10$ ___ $3/10$	$7/10 > 3/10$
3	$1/4$ ___ $1/12$	$1/4 > 1/12$
4	$6/7$ ___ $6/9$	$6/7 > 6/9$
5	$4/13$ ___ $9/13$	$4/13 < 9/13$
6	$3/15$ ___ $3/14$	$3/15 < 3/14$

PART 2 • APPLY IT

1. **Mia eats more. $4/7 > 4/9$.** The numerators are the same. Seventh-sized pieces are larger than ninth-sized pieces, so $4/7$ is greater than $4/9$.
2. **Elena plants flowers in more of a plot. $9/12 > 2/12$.** The denominators are the same. Elena has more twelfths, so $9/12$ is greater than $2/12$.

CHALLENGE

No. The pizzas are different-size wholes, so the fractions cannot be compared without more information.

Accept the correct comparison symbol and a correct explanation using equal-sized wholes, same numerators, or same denominators. For the challenge, accept any response that clearly states that the whole sizes must be known or must be the same.