

Fraction Size Detectives

Compare fractions by thinking about equal parts.

GRADE 3 • TEKS 3.3.H

3.3.H "compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models."

NAME _____

DATE _____

COMPARE THE PARTS

When two fractions have the same denominator, the fraction with more shaded parts is greater. When two fractions have the same numerator, the fraction with fewer equal parts is greater because each part is larger.

WORKED EXAMPLE

Compare $\frac{3}{8}$ and $\frac{3}{5}$. Write $<$, $>$, or $=$.



- Both fractions have the same numerator, 3.
- Fifths are larger parts than eighths.
- So $\frac{3}{5}$ is greater than $\frac{3}{8}$.

Answer: $\frac{3}{8} < \frac{3}{5}$

PRACTICE 6 problems

1 Compare: $\frac{2}{7}$ ____ $\frac{5}{7}$

ANSWER _____

2 Use the models. Compare: $\frac{4}{9}$ ____ $\frac{4}{6}$

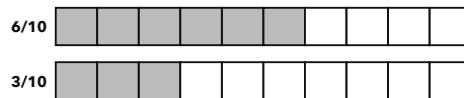


ANSWER _____

3 Compare: $\frac{1}{3}$ ____ $\frac{1}{8}$

ANSWER _____

4 Use the models. Compare: $\frac{6}{10}$ ____ $\frac{3}{10}$



ANSWER _____

5 Compare: $\frac{5}{12}$ ____ $\frac{5}{9}$

ANSWER _____

6 Compare $\frac{7}{11}$ and $\frac{9}{11}$. Write the symbol and explain how you know.

ANSWER _____

APPLY IT Show your work

- 1** Jordan finished $\frac{3}{8}$ of a comic book on Monday. On Tuesday, Jordan finished $\frac{5}{8}$ of the comic book. Which day did Jordan finish more of the comic book? Write a comparison sentence.

WORK SPACE

ANSWER _____

- 2** At an art club, Mia colored $\frac{4}{10}$ of a mural. Leo colored $\frac{4}{7}$ of an equal-sized mural. Who colored the greater part of a mural?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Ava says, " $\frac{6}{13}$ is greater than $\frac{6}{9}$ because 13 is greater than 9." Is Ava correct? Write the correct comparison and explain why.

WORK SPACE AND ANSWER

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Compare: $2/7$ ___ $5/7$	$2/7 < 5/7$
2	Use the models. Compare: $4/9$ ___ $4/6$	$4/9 < 4/6$
3	Compare: $1/3$ ___ $1/8$	$1/3 > 1/8$
4	Use the models. Compare: $6/10$ ___ $3/10$	$6/10 > 3/10$
5	Compare: $5/12$ ___ $5/9$	$5/12 < 5/9$
6	Compare $7/11$ and $9/11$. Write the symbol and explain how you know.	$7/11 < 9/11$. The denominators are the same, and 7 is fewer parts than 9.

PART 2 • APPLY IT

1. **Jordan finished more on Tuesday. $3/8 < 5/8$.** The denominators are both 8. Five eighths is greater than three eighths because 5 is greater than 3.
2. **Leo colored the greater part. $4/10 < 4/7$.** Both fractions have a numerator of 4. Sevenths are larger parts than tenths, so $4/7$ is greater.

CHALLENGE

No. $6/13 < 6/9$. Both fractions have 6 parts, but ninths are larger parts than thirteenths.

Accept $<$, $>$, or words such as greater than and less than. For explanations, accept reasoning that correctly names same numerators or denominators and compares the sizes or number of equal parts.