

Fraction Size Showdown

Compare fractions by thinking about the size of each part.

GRADE 4 • 4.NS.3.b

4.NS.3.b "Compare and order no more than four fractions (proper or improper), and/or mixed numbers, with like numerators and unlike denominators by comparing the size of the parts using fractions with denominators of 12 or less (e.g., $38 < 35$)..."

NAME _____

DATE _____

SAME NUMBER OF PARTS

When fractions have the same numerator, they show the same number of parts. The fraction with the smaller denominator is greater because each part is larger.

WORKED EXAMPLE

Compare $10/11$ and $10/12$.

1. Both fractions have 10 parts.
2. Elevenths are larger parts than twelfths.
3. The fraction with larger parts is greater.

Answer: $10/11 > 10/12$

PRACTICE 6 problems

1 Compare: $3/4$ ____ $3/7$

ANSWER _____

2 Compare: $2/8$ ____ $2/5$

ANSWER _____

3 Order from least to greatest: $4/9$, $4/3$, $4/6$

ANSWER _____

4 Compare: $1 \frac{1}{2}$ ____ $1 \frac{1}{8}$

ANSWER _____

5 Order from greatest to least: $7/9$, $7/5$, $7/8$

ANSWER _____

6 Compare: $1 \frac{2}{3}$ ____ $1 \frac{2}{4}$

ANSWER _____

APPLY IT Show your work

- 1** Maya and Jalen each color 3 equal parts of a same-size mural strip. Maya colors $\frac{3}{4}$ of her strip. Jalen colors $\frac{3}{8}$ of his strip. Who colors more? Write a comparison.

WORK SPACE

ANSWER _____

- 2** On the same-length game track, four players move their tokens $\frac{2}{3}$, $\frac{2}{7}$, $\frac{2}{5}$, and $\frac{2}{9}$ of the way to the finish. Order the distances from least to greatest.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Ava says, " $\frac{3}{8}$ is greater than $\frac{3}{4}$ because 8 is greater than 4." Is Ava correct? Write one sentence to explain.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Compare: $\frac{3}{4}$ ____ $\frac{3}{7}$	$\frac{3}{4} > \frac{3}{7}$
2	Compare: $\frac{2}{8}$ ____ $\frac{2}{5}$	$\frac{2}{8} < \frac{2}{5}$
3	Order from least to greatest: $\frac{4}{9}$, $\frac{4}{3}$, $\frac{4}{6}$	$\frac{4}{9} < \frac{4}{6} < \frac{4}{3}$
4	Compare: $1\frac{1}{2}$ ____ $1\frac{1}{8}$	$1\frac{1}{2} > 1\frac{1}{8}$
5	Order from greatest to least: $\frac{7}{9}$, $\frac{7}{5}$, $\frac{7}{8}$	$\frac{7}{5} > \frac{7}{8} > \frac{7}{9}$
6	Compare: $1\frac{2}{3}$ ____ $1\frac{2}{4}$	$1\frac{2}{3} > 1\frac{2}{4}$

PART 2 • APPLY IT

1. **Maya colors more. $\frac{3}{4} > \frac{3}{8}$.** Both students color 3 parts. Fourths are larger parts than eighths, so $\frac{3}{4}$ is greater than $\frac{3}{8}$.
2. **$\frac{2}{9} < \frac{2}{7} < \frac{2}{5} < \frac{2}{3}$** Each fraction has 2 parts. With the same numerator, a larger denominator means smaller parts and a smaller fraction.

CHALLENGE

No. $\frac{3}{8} < \frac{3}{4}$ because eighths are smaller parts than fourths, and both fractions have 3 parts.

Accept comparison symbols or correct comparison words. For explanations, accept reasoning that fractions with the same numerator have a greater value when the denominator is smaller because the parts are larger.