

Fraction Trail Quest

Compare, order, and place fractions greater than one.

GRADE 4 • MA.4.FR.1.4

MA.4.FR.1.4 "Plot, order and compare fractions, including mixed numbers and fractions greater than one, with different numerators and different denominators."

NAME _____

DATE _____

COMPARE WITH COMMON PARTS

To compare fractions, rename them with a common denominator. Then compare the numerators. For mixed numbers, compare the whole-number parts first, or rename each number as a fraction greater than one.

WORKED EXAMPLE

Compare $\frac{7}{12}$ and $\frac{5}{8}$.

1. Find a common denominator: 24.
2. Rename $\frac{7}{12}$ as $\frac{14}{24}$.
3. Rename $\frac{5}{8}$ as $\frac{15}{24}$.
4. Since $\frac{14}{24} < \frac{15}{24}$, $\frac{7}{12} < \frac{5}{8}$.

Answer: $\frac{7}{12} < \frac{5}{8}$

PRACTICE 6 problems

1 Write $<$, $>$, or $=$. $\frac{3}{5}$ ____ $\frac{7}{10}$

ANSWER _____

2 Order from least to greatest: $\frac{2}{3}$, $\frac{5}{9}$, $\frac{3}{4}$

ANSWER _____

3 Write $<$, $>$, or $=$. $1\frac{2}{3}$ ____ $\frac{9}{7}$

ANSWER _____

4 Write $<$, $>$, or $=$. $\frac{11}{6}$ ____ $1\frac{4}{5}$

ANSWER _____

5 A number line from 1 to 2 is divided into eighths. Plot point P at $\frac{13}{8}$. What mixed number labels point P?

ANSWER _____

6 Order from least to greatest: $\frac{7}{6}$, $1\frac{1}{5}$, $\frac{5}{4}$

ANSWER _____

APPLY IT Show your work

- 1** For a poster project, Rina used $\frac{4}{9}$ meter of ribbon. Omar used $\frac{5}{6}$ meter of ribbon. Who used more ribbon, and how much more did that person use?

WORK SPACE

ANSWER _____

- 2** At a bike skills course, Ava rode $1\frac{3}{8}$ miles, Ben rode $\frac{7}{5}$ miles, and Carlos rode $1\frac{1}{2}$ miles. List the distances from least to greatest.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Sam says $\frac{13}{9}$ is greater than $1\frac{1}{2}$ because 13 is greater than 1. Is Sam correct? Explain your reasoning with equivalent fractions.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Write $<$, $>$, or $=$. $\frac{3}{5}$ ____ $\frac{7}{10}$	$\frac{3}{5} < \frac{7}{10}$
2	Order from least to greatest: $\frac{2}{3}$, $\frac{5}{9}$, $\frac{3}{4}$	$\frac{5}{9}$, $\frac{2}{3}$, $\frac{3}{4}$
3	Write $<$, $>$, or $=$. $1\frac{2}{3}$ ____ $\frac{9}{7}$	$1\frac{2}{3} > \frac{9}{7}$
4	Write $<$, $>$, or $=$. $\frac{11}{6}$ ____ $1\frac{4}{5}$	$\frac{11}{6} > 1\frac{4}{5}$
5	A number line from 1 to 2 is divided into eighths. Plot point P at $\frac{13}{8}$. What mixed number labels point P?	$1\frac{5}{8}$
6	Order from least to greatest: $\frac{7}{6}$, $1\frac{1}{5}$, $\frac{5}{4}$	$\frac{7}{6}$, $1\frac{1}{5}$, $\frac{5}{4}$

PART 2 • APPLY IT

- Omar used more ribbon. He used $\frac{7}{18}$ meter more.** Rename $\frac{4}{9}$ as $\frac{8}{18}$ and $\frac{5}{6}$ as $\frac{15}{18}$. Subtract $\frac{8}{18}$ from $\frac{15}{18}$ to get $\frac{7}{18}$.
- $1\frac{3}{8}$ miles, $\frac{7}{5}$ miles, $1\frac{1}{2}$ miles** Use a common denominator of 40: $1\frac{3}{8} = \frac{55}{40}$, $\frac{7}{5} = \frac{56}{40}$, and $1\frac{1}{2} = \frac{60}{40}$.

CHALLENGE

No. $\frac{13}{9} = \frac{26}{18}$ and $1\frac{1}{2} = \frac{27}{18}$. Since $\frac{26}{18} < \frac{27}{18}$, $\frac{13}{9} < 1\frac{1}{2}$.

Accept equivalent fractions or mixed numbers when they name the same value. For ordering items, accept the correct order written with commas or with comparison symbols.