LESSON MAKER PRO

Fraction Face-Off

Compare fractions and mixed numbers with confidence.

GRADE 4 · 4.NS.3.d

4.NS.3.d "Compare two fractions (proper or improper) and/or mixed numbers using fractions with denominators of 12 or less, using the symbols >, <, and = (e.g., 23 > 17). Justify comparisons orally, in writing, or with a model.*"

NAME _____ **DATE** _____

COMPARE BY MAKING MATCHES

To compare fractions, rewrite them with the same denominator, then compare the numerators. To compare mixed numbers, compare the whole numbers first. If the whole numbers match, compare the fractional parts.

WORKED EXAMPLE

Compare 5/6 and 7/9. Write <, >, or =.

1. The least common denominator of 6 and 9 is 18.
2. Rewrite 5/6 as 15/18.
3. Rewrite 7/9 as 14/18.
4. Since 15/18 is greater than 14/18, choose >.

Answer: 5/6 > 7/9

PRACTICE 6 problems

1 Compare: 3/4 ___ 2/3

ANSWER _____

2 Compare: 7/8 ___ 9/12

ANSWER _____

3 Compare: 1 1/2 ___ 1 5/12

ANSWER _____

4 Compare: 11/6 ___ 1 7/8

ANSWER _____

5 Compare: 13/10 ___ 5/4

ANSWER _____

6 Compare: 2 2/3 ___ 8/3. Write the symbol and a sentence that explains your reasoning.

ANSWER _____

_____

APPLY IT Show your work

1 At a robotics club, Nia spent 2/5 hour programming. Leo spent 3/8 hour programming. Who spent more time programming? Write a comparison sentence using <, >, or =.

WORK SPACE

ANSWER _____

2 For a school fun run, Jay walked 1 3/4 miles. Priya walked 7/4 miles. Did they walk the same distance? Write a comparison sentence using <, >, or =.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Put these amounts in order from least to greatest: 1 5/8, 13/8, 1 7/12. Then write one or two sentences to explain how you know.

WORK SPACE AND ANSWER

ANSWER KEY

Fraction Face-Off

GRADE 4 · 4.NS.3.d

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Compare: 3/4 ___ 2/3	**3/4 > 2/3**
2	Compare: 7/8 ___ 9/12	**7/8 > 9/12**
3	Compare: 1 1/2 ___ 1 5/12	**1 1/2 > 1 5/12**
4	Compare: 11/6 ___ 1 7/8	**11/6 < 1 7/8**
5	Compare: 13/10 ___ 5/4	**13/10 > 5/4**
6	Compare: 2 2/3 ___ 8/3. Write the symbol and a sentence that explains your reasoning.	**2 2/3 = 8/3. Both numbers are equal to 2 2/3.**

PART 2 · APPLY IT

1. **Nia spent more time. 2/5 > 3/8.** Use a denominator of 40: 2/5 = 16/40 and 3/8 = 15/40. Since 16/40 is greater, Nia spent more time.
2. **Yes. 1 3/4 = 7/4.** Change 1 3/4 to an improper fraction: 1 3/4 = 7/4. The distances are equal.

CHALLENGE

1 7/12, 1 5/8, 13/8. All three amounts have a whole number of 1. Using twenty-fourths, 1 7/12 = 1 14/24, 1 5/8 = 1 15/24, and 13/8 = 1 15/24, so 1 5/8 = 13/8.

Accept equivalent fractions, improper fractions, mixed numbers, or valid common-denominator reasoning. For written explanations, accept any correct comparison method that clearly supports the symbol or order.