

Fraction Match Quest

Make equal fractions and compare their sizes.

GRADE 4 • 4.NF.A

CCSS.Math.Content.4.NF.A "Extend understanding of fraction equivalence and ordering."

NAME _____

DATE _____

EQUIVALENT AND ORDERED

Equivalent fractions name the same amount. Multiply or divide both the numerator and denominator by the same whole number greater than 0, when it divides evenly, to make an equivalent fraction. To compare fractions, use a shared denominator, or remember that with the same numerator, the smaller denominator makes the larger fraction.

WORKED EXAMPLE

Find a fraction equivalent to $\frac{3}{8}$ by multiplying the numerator and denominator by 2.

1. Start with $\frac{3}{8}$.
2. Multiply the numerator and denominator by 2.
3. $(3 \times 2)/(8 \times 2) = 6/16$.
4. The fractions $\frac{3}{8}$ and $\frac{6}{16}$ name the same amount.

Answer: $\frac{6}{16}$

PRACTICE 6 problems

1 $\frac{1}{2} = x/10$. What is x ?

ANSWER _____

2 Are $\frac{4}{9}$ and $\frac{12}{27}$ equivalent? Write yes or no.

ANSWER _____

3 Write $<$, $>$, or $=$. $\frac{5}{7}$ $\underline{\hspace{1cm}}$ $\frac{5}{11}$

ANSWER _____

4 Put these fractions in order from least to greatest: $\frac{7}{12}$, $\frac{1}{12}$, $\frac{11}{12}$.

ANSWER _____

5 $\frac{10}{25} = x/5$. What is x ?

ANSWER _____

6 Write $<$, $>$, or $=$. $\frac{11}{15}$ $\underline{\hspace{1cm}}$ $\frac{11}{20}$

ANSWER _____

APPLY IT Show your work

- 1** At the library, Jalen has read $\frac{5}{12}$ of a graphic novel. Maya has read $\frac{7}{12}$ of the same graphic novel. Who has read more?

WORK SPACE

ANSWER _____

- 2** Two players filled progress bars in a game. Noor filled $\frac{2}{5}$ of a bar, and Eli filled $\frac{4}{10}$ of a bar. Did they fill equal amounts?

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Put these fractions in order from least to greatest: $\frac{1}{2}$, $\frac{4}{10}$, $\frac{7}{10}$. Explain by rewriting $\frac{1}{2}$ with denominator 10.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	$\frac{1}{2} = \frac{x}{10}$. What is x ?	5
2	Are $\frac{4}{9}$ and $\frac{12}{27}$ equivalent? Write yes or no.	yes
3	Write $<$, $>$, or $=$. $\frac{5}{7}$ <u> </u> $\frac{5}{11}$	$>$
4	Put these fractions in order from least to greatest: $\frac{7}{12}$, $\frac{1}{12}$, $\frac{11}{12}$.	$\frac{1}{12}$, $\frac{7}{12}$, $\frac{11}{12}$
5	$\frac{10}{25} = \frac{x}{5}$. What is x ?	2
6	Write $<$, $>$, or $=$. $\frac{11}{15}$ <u> </u> $\frac{11}{20}$	$>$

PART 2 • APPLY IT

1. **Maya** The denominators are the same, so compare the numerators. Since 7 is greater than 5, Maya has read more.
2. **Yes, they filled equal amounts.** Multiply $\frac{2}{5}$ by $\frac{2}{2}$ to get $\frac{4}{10}$. The fractions are equivalent.

CHALLENGE

$\frac{4}{10} < \frac{1}{2} < \frac{7}{10}$ because $\frac{1}{2} = \frac{5}{10}$.

Accept equivalent fraction forms when they match the requested value or comparison. For the challenge, accept any clear explanation that shows $\frac{1}{2} = \frac{5}{10}$ and gives the correct order.