

Fraction Match Quest

Show the same value in more than one form.

GRADE 4 • 4.NR.4.1

4.NR.4.1 "Using concrete materials, drawings, and number lines, demonstrate and explain the relationship between equivalent fractions, including fractions greater than one..."

NAME _____

DATE _____

PART 1: PRACTICE

Equivalent fractions name the same amount, even when their numerators and denominators look different. Multiply the numerator and denominator by the same number to make an equivalent fraction. A number multiplied by 1 stays the same, and a fraction such as $\frac{2}{2}$ equals 1.

WORKED EXAMPLE

Write an equivalent fraction for $\frac{11}{13}$ with a denominator of 26.

- $\frac{11}{13} \times 1 = \frac{11}{13}$.
- $\frac{2}{2} = 1$, so multiply by $\frac{2}{2}$.
- $\frac{11}{13} \times \frac{2}{2} = \frac{22}{26}$.

Answer: $\frac{22}{26}$

PRACTICE 6 problems

- 1** Draw a bar split into 8 equal parts. Shade 6 parts. Write the shaded fraction and an equivalent fraction with denominator 4.

ANSWER _____

- 2** Copy a number line from 0 to 2. Divide each whole into 4 equal jumps. Mark $\frac{5}{4}$. Then write an equivalent fraction with denominator 8.

ANSWER _____

- 3** Fill in the blank: $\frac{7}{9} = \frac{\quad}{27}$

ANSWER _____

- 4** Fill in the blank: $\frac{12}{15} = \frac{\quad}{5}$

ANSWER _____

- 5** Use the identity property of multiplication to complete the equation: $\frac{7}{10} \times 1 = \frac{\quad}{\quad}$

ANSWER _____

- 6** Write an equivalent fraction for $\frac{14}{6}$ with a denominator of 3.

ANSWER _____

APPLY IT Show your work

- 1** Kai is making an 8-minute highlight video for the school soccer team. He has finished $\frac{6}{8}$ of the video. Write $\frac{6}{8}$ with a denominator of 4. How many minutes of the video has Kai finished?

WORK SPACE

ANSWER _____

- 2** At art club, 12 of 16 photos on a display show nature scenes. What fraction of the photos show nature scenes? Write an equivalent fraction with a denominator of 4.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

A game board has a number line from 0 to 2 marked in twelfths. Nia says $\frac{15}{12}$ and $\frac{5}{4}$ belong at the same point. Is Nia correct? Explain by showing how the fractions are equivalent, then state the point on the number line.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Draw a bar split into 8 equal parts. Shade 6 parts. Write the shaded fraction and an equivalent fraction with denominator 4.	$6/8 = 3/4$
2	Copy a number line from 0 to 2. Divide each whole into 4 equal jumps. Mark $5/4$. Then write an equivalent fraction with denominator 8.	$5/4 = 10/8$, marked at $1\ 1/4$
3	Fill in the blank: $7/9 = \underline{\hspace{1cm}}/27$	$21/27$
4	Fill in the blank: $12/15 = \underline{\hspace{1cm}}/5$	$4/5$
5	Use the identity property of multiplication to complete the equation: $7/10 * 1 = \underline{\hspace{1cm}}$	$7/10$
6	Write an equivalent fraction for $14/6$ with a denominator of 3.	$7/3$

PART 2 • APPLY IT

- $6/8 = 3/4$, and Kai has finished 6 minutes.** Simplify $6/8$ by dividing the numerator and denominator by 2 to get $3/4$. Find $3/4$ of 8 minutes, which is 6 minutes.
- $12/16 = 3/4$** Divide both 12 and 16 by 4. The equivalent fraction is $3/4$.

CHALLENGE

Yes. $15/12 = 5/4$ because $5/4 * 3/3 = 15/12$. Both fractions are at $1\ 1/4$.

Accept correctly drawn bars with equal parts and correct shading. On number-line tasks, accept an accurate mark at the correct location and any equivalent fraction that meets the stated denominator.