

Fraction Match Quest

Find fractions that name the same amount.

GRADE 3 • 3.NF.A.3b

CCSS.Math.Content.3.NF.A.3b "Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model."

NAME _____

DATE _____

SAME AMOUNT, NEW NAME

Equivalent fractions name the same amount. To make an equivalent fraction, multiply the top and bottom numbers by the same whole number, or divide both by the same whole number when it divides evenly.

WORKED EXAMPLE

Fill in the blank: $3/8 = x/24$

- 24 is 3 times 8.
- Multiply the numerator 3 by 3.
- $3 \times 3 = 9$, so $x = 9$.

Answer: $3/8 = 9/24$

PRACTICE 6 problems

1 Fill in the blank: $1/5 = x/20$

ANSWER _____

2 Fill in the blank: $5/6 = x/30$

ANSWER _____

3 Which fraction is equivalent to $1/5$? A. $4/20$
B. $4/15$ C. $5/20$

ANSWER _____

4 Fill in the blank: $7/10 = 14/x$

ANSWER _____

5 Write an equivalent fraction with denominator 5: $16/20 = ?/5$

ANSWER _____

6 Are $10/16$ and $15/20$ equivalent? Write yes or no.

ANSWER _____

APPLY IT Show your work

- 1** The art club's mural is split into 20 equal tiles. Aisha paints 5 tiles blue. What fraction of the mural is blue? Write an equivalent fraction with denominator 4.

WORK SPACE

ANSWER _____

- 2** In a video game, Leo has completed 7 of 10 quests in a chapter. A later screen shows 20 equal progress parts. How many parts should be shaded to show the same progress? Write the equivalent fraction.

WORK SPACE

ANSWER _____

CHALLENGE One step up

CHALLENGE

Nora says that $20/25 = 4/5$. Is she correct? Explain how you know.

PART 1 • PRACTICE

#	PROBLEM	ANSWER
1	Fill in the blank: $\frac{1}{5} = \frac{x}{20}$	x = 4
2	Fill in the blank: $\frac{5}{6} = \frac{x}{30}$	x = 25
3	Which fraction is equivalent to $\frac{1}{5}$? A. $\frac{4}{20}$ B. $\frac{4}{15}$ C. $\frac{5}{20}$	A. $\frac{4}{20}$
4	Fill in the blank: $\frac{7}{10} = \frac{14}{x}$	x = 20
5	Write an equivalent fraction with denominator 5: $\frac{16}{20} = \frac{?}{5}$	$\frac{4}{5}$
6	Are $\frac{10}{16}$ and $\frac{15}{20}$ equivalent? Write yes or no.	No

PART 2 • APPLY IT

- $\frac{5}{20} = \frac{1}{4}$** The blue part is $\frac{5}{20}$. Divide both numbers by 5 to get $\frac{1}{4}$.
- 14 parts, or $\frac{14}{20}$** Multiply both numbers in $\frac{7}{10}$ by 2. The equivalent fraction is $\frac{14}{20}$.

CHALLENGE

Yes. Dividing both numbers in $\frac{20}{25}$ by 5 gives $\frac{4}{5}$, so they name the same amount.

Accept any clearly written equivalent form when the requested fraction is included. For the challenge, accept explanations that state both numerator and denominator are divided by 5.