

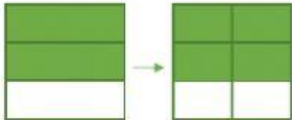
14. Equivalent Fractions Rule

A. Visual learning

How can you use multiplication or division to find equivalent fractions?

Use Multiplication

What are some fractions equivalent to $\frac{2}{3}$?



$$\frac{2}{3} = \frac{4}{6}$$

To find the equivalent fractions, **multiply** the numerator and the denominator by the **same number**.

Multiply by 2	Multiply by 3	Multiply by 40
$\frac{2}{3} \xrightarrow{\times 2} \frac{4}{6}$	$\frac{2}{3} \xrightarrow{\times 3} \frac{6}{9}$	$\frac{2}{3} \xrightarrow{\times 40} \frac{80}{120}$

$\frac{2}{3}$; $\frac{4}{6}$; $\frac{6}{9}$ and $\frac{80}{120}$ are **equivalent fractions**.

Use Division

What are some fractions equivalent to $\frac{18}{24}$?

Divide the numerator and the denominator by the **same number**.

Divide by 2	Divide by 3	Divide by 6
$\frac{18}{24} \xrightarrow{\div 2} \frac{9}{12}$	$\frac{18}{24} \xrightarrow{\div 3} \frac{6}{8}$	$\frac{18}{24} \xrightarrow{\div 6} \frac{3}{4}$

$\frac{9}{12}$; $\frac{6}{8}$; $\frac{3}{4}$ and $\frac{18}{24}$ are **equivalent fractions**.

B. Vocabulary

equivalent fractions: _____

multiply: _____

same number: _____

divide: _____

C. Independent practice

In 1 – 4, write the **missing numbers**.

1. $\frac{2}{7} = \frac{\boxed{}}{21}$

$\times 3$ (arrow from 7 to 21)
 $\times 3$ (arrow from 2 to 6)

2. $\frac{1}{3} = \frac{4}{\boxed{}}$

$\times$ (arrow from 1 to 4)
 $\times$ (arrow from 3 to 12)

3. $\frac{6}{9} = \frac{\boxed{}}{3}$

$\div$ (arrow from 6 to 2)
 $\div$ (arrow from 9 to 3)

4. $\frac{12}{\boxed{}} = \frac{3}{5}$

$\div$ (arrow from 12 to 4)
 $\div$ (arrow from 3 to 1)

In 5 – 8, multiply or divide to find an equivalent fraction to the given one.

5. $\frac{12}{20} = \frac{\boxed{}}{\boxed{}}$

6. $\frac{6}{8} = \frac{\boxed{}}{\boxed{}}$

7. $\frac{5}{9} = \frac{\boxed{}}{\boxed{}}$

8. $\frac{3}{8} = \frac{\boxed{}}{\boxed{}}$

9. Tick (✓) all fractions that are equivalent to $\frac{3}{4}$.

☐

$\frac{2}{4}$

☐

$\frac{1}{3}$

☐

$\frac{6}{8}$

☐

$\frac{12}{16}$

☐

$\frac{9}{16}$

☐

$\frac{9}{12}$



10. In Missy's sports-cards collection, $\frac{2}{3}$ of the cards are football. In Frank's collection, $\frac{12}{21}$ are football.

Frank says they have the same fraction of football cards.

Is he correct? Explain.
