

Bright Horizons Academy

Grade 4: Mathematics

Equivalent Fractions

Objective:

Students will *understand* that two fractions can represent the same amount even if they look different and learn how to *identify* and *create* equivalent fractions.

Core Content:

Equivalent fractions are fractions that show the same amount but use different numbers in the **numerator** and **denominator**.

For example, $\frac{1}{2}$ and $\frac{2}{4}$ are equivalent because they both represent the same portion of a whole. You can find equivalent fractions by multiplying or dividing the numerator and denominator by the same number.

To find more equivalent fractions for $\frac{1}{2}$, you can multiply both by 3, you get $\frac{3}{6}$. If you multiply both by 4, you get $\frac{4}{8}$. Each of these fractions represents the same amount!

Examples:

1. $\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$ (all represent *half* of something)

2. $1/3 = 2/6$ (Both mean one-third of a whole. If you multiply the numerator and denominator of $1/3$ by 2, you get $2/6$, which is equivalent.)
3. $3/5 = 6/10$ (both are the same size, just written differently)

Practice Questions:

1. Is $2/3$ equivalent to $4/6$?
2. What fraction is equivalent to $1/4$ if you multiply the numerator and denominator by 3?
3. Which of these pairs are equivalent fractions: $2/5$ and $4/10$, or $3/8$ and $6/9$?
4. Find an equivalent fraction for $3/7$ by multiplying the numerator and denominator by 2.
5. True or False: $2/6$ is equivalent to $1/3$.

Answers to Practice Questions:

1. Yes, $2/3 = 4/6$
2. $3/12$
3. $2/5$ and $4/10$ are equivalent; $3/8$ and $6/9$ are not
4. $6/14$
5. True