MATHEMATICS · GRADES 4-6

Converting mixed numbers to improper fractions

Difficulty level: Intermediate

Mathematics: Grades 4-6

This document was made by AI and there may be mistakes. If a question or answer looks wrong, use the Flag a mistake button to let Brett know so he can fix it.

Overview of the concept

This is how you turn a mixed amount, like two and a half pizzas, into a single fraction you can multiply or divide. Scaling a recipe up or down needs the amount as one fraction, not a whole number plus a part. It is a quick conversion, but it is the step that makes fraction multiplication and division possible (see Converting improper fractions to mixed numbers).



© 2026 Brett Robbins. All Rights Reserved.

Rule

Mixed numbers and improper fractions: a mixed number is a whole number plus a fraction. An improper fraction is a single fraction with a numerator larger than its denominator.

To write a mixed number as an improper fraction, multiply the whole number by the denominator, add the numerator, and keep the same denominator.

Worked examples

EXAMPLE 1

Q How do you write $2\frac{1}{3}$ as an improper fraction?

SOLUTION

The one rule to remember first: multiply the whole number by the denominator, then add the numerator.

$2 \times 3 = 6$, then $6 + 1 = 7$

So $2\frac{1}{3} = \frac{7}{3}$

© 2026 Brett Robbins. All Rights Reserved.

EXAMPLE 2

Q How do you write $3\frac{2}{5}$ as an improper fraction?

SOLUTION

Multiply the whole number by the denominator, then add the numerator.

$3 \times 5 = 15$, then $15 + 2 = 17$

So $3\frac{2}{5} = \frac{17}{5}$

Practice questions

1 Write $1\frac{3}{4}$ as an improper fraction.

Understand It with Pulse | Flag a mistake

2 Write $3\frac{1}{5}$ as an improper fraction.

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

3 What improper fraction is $4\ \frac{1}{2}$?

Understand It with Pulse | Flag a mistake

4 Write $2\ \frac{2}{3}$ as an improper fraction.

Understand It with Pulse | Flag a mistake

5 Write $5\ \frac{1}{4}$ as an improper fraction.

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

6 Write $1\ \frac{1}{2}$ as an improper fraction.

Understand It with Pulse | Flag a mistake

7 Fill in the blank $2\ \frac{3}{4} = \frac{?}{4}$

Understand It with Pulse | Flag a mistake

8 Write $3\ \frac{3}{4}$ as an improper fraction.

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

9 Write $4\frac{2}{3}$ as an improper fraction.

Understand It with Pulse | Flag a mistake

10 Write $2\frac{4}{5}$ as an improper fraction.

Understand It with Pulse | Flag a mistake

© 2026 Brett Robbins. All Rights Reserved.

ANSWER KEY

1. $\frac{7}{4}$
2. $\frac{16}{5}$
3. $\frac{9}{2}$
4. $\frac{8}{3}$
5. $\frac{21}{4}$
6. $\frac{3}{2}$
7. $\frac{11}{4}$
8. $\frac{15}{4}$
9. $\frac{14}{3}$
10. $\frac{14}{5}$

© 2026 Brett Robbins. All Rights Reserved.