Improper Fractions Example

An improper fraction has a numerator greater than or equal to its positive denominator, so its value is at least 1. Convert 11/4 to a mixed number using division. The quotient counts complete groups of fourths, while the remainder records the fraction left over.

Example

Write 11/4 as a mixed number.

$$11 / 4 = ?$$

Step-by-step solution

STEP 1

Confirm it is improper

The numerator is larger than the denominator.

$$11 > 4, \text{ so } 11/4 > 1$$

STEP 2

Divide numerator by denominator

Four goes into eleven twice, with three remaining.

$$11 = 4 \times 2 + 3$$

STEP 3

Write the mixed number

Use the quotient as the whole part and the remainder over 4.

$$11/4 = 2\ 3/4$$

STEP 4

Convert back to check

Two wholes equal eight fourths; three more fourths restore eleven.

$$(2 \times 4 + 3) / 4 = 11/4$$

ANSWER

11/4 = 2 3/4

2 x 4 + 3 = 11, so the mixed number represents the original fraction.

Use this worked example to review the method, then try a similar problem on your own.