

Fractions

How do I change an improper fraction to a mixed number?

The following is a quick, informal method that you might like. It takes longer to read it than it does to actually put it in practice.

Example 1: Convert $\frac{13}{4}$ to a mixed number.

Step 1: Look at the denominator (in this case, 4) and ask yourself, “What number do I multiply 4 by so that I get as close as I can to 13 without exceeding it?”

The answer is **3**.

3 becomes the *whole number part* of the mixed number.

Step 2: Now ask yourself, “When I multiplied 4 x 3, how close did I get to 13?”

Since $4 \times 3 = 12$, you got within **1** of 13.

The amount you come up short is the *numerator* of the fraction.

The *denominator* will be the same as the original.

$$3 \frac{1}{4}$$

Example 2: Convert $\frac{9}{2}$ to a mixed number.

Step 1: What number, when multiplied by 2 gets you as close as possible to 9 without going past it?

The answer is **4**, so that will be the whole number part of the mixed number.

Step 2: Now ask yourself, “When I multiplied 2 x 4, how close did I get to 9?”

Since $2 \times 4 = 8$, you got within **1** of 9. **1** will become the numerator of the fraction. Use the original denominator.

$$4 \frac{1}{2}$$

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