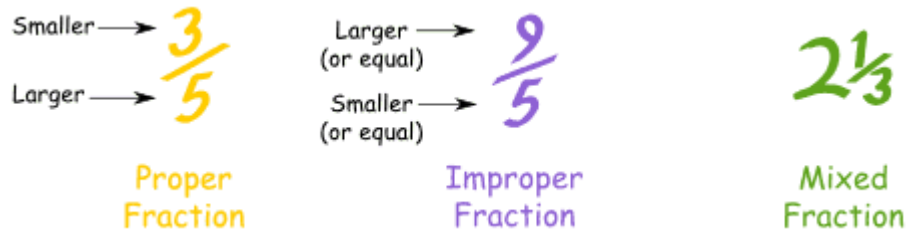


Three Types of Fractions



Proper Fractions: The numerator is less than the denominator

Examples: $\frac{1}{3}$, $\frac{3}{4}$, $\frac{2}{7}$

Improper Fractions: The numerator is greater than (or equal to) the denominator

Examples: $\frac{4}{3}$, $\frac{11}{4}$, $\frac{7}{7}$

Mixed Fractions: A whole number and proper fraction together

Examples: $1\frac{1}{3}$, $2\frac{1}{4}$, $16\frac{2}{5}$

An Improper fraction has a top number **larger** than (or equal to) the bottom number,

It is "**top-heavy**" $\frac{7}{4}$ $\frac{7}{3}$ $\frac{16}{5}$ $\frac{8}{4}$ $\frac{9}{2}$

Convert an improper fraction to a mixed fraction

- Divide the numerator by the denominator.
- Write down the whole number answer
- Then write down any remainder above the denominator.

Converting mixed fractions to improper fraction

- Multiply the whole number part by the fraction's denominator.
- Add that to the numerator
- Then write the result on top of the denominator

Example: Convert $\frac{16}{3}$ to a mixed fraction.

Example: Convert $5\frac{7}{3}$ to an improper fraction

Divide:

$$16 \div 3 = 5 \text{ with a remainder of } 1$$

Write down the 5 and then write down the remainder (1) above the denominator (3),

like this: $5\frac{1}{3}$

Multiply the whole number by the denominator:

$$5 \times 3 = 15$$

Add the numerator to this: $15 + 7 = 22$

Then write the answer above the denominator: $\frac{22}{3}$