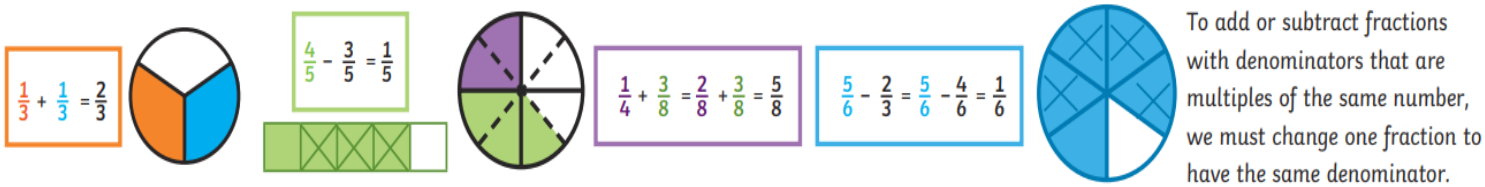
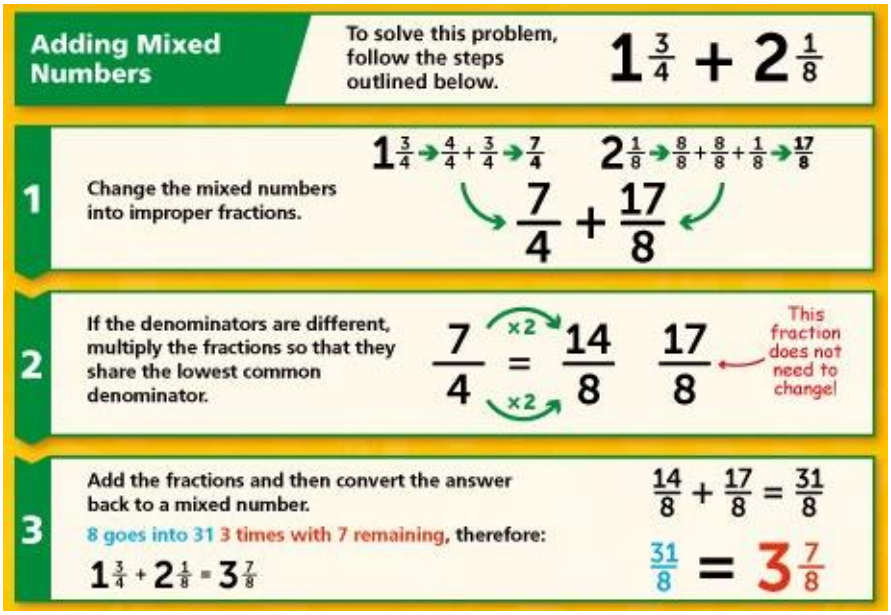
Section 4 & 5 —Adding and Subtracting Fractions (2 weeks)

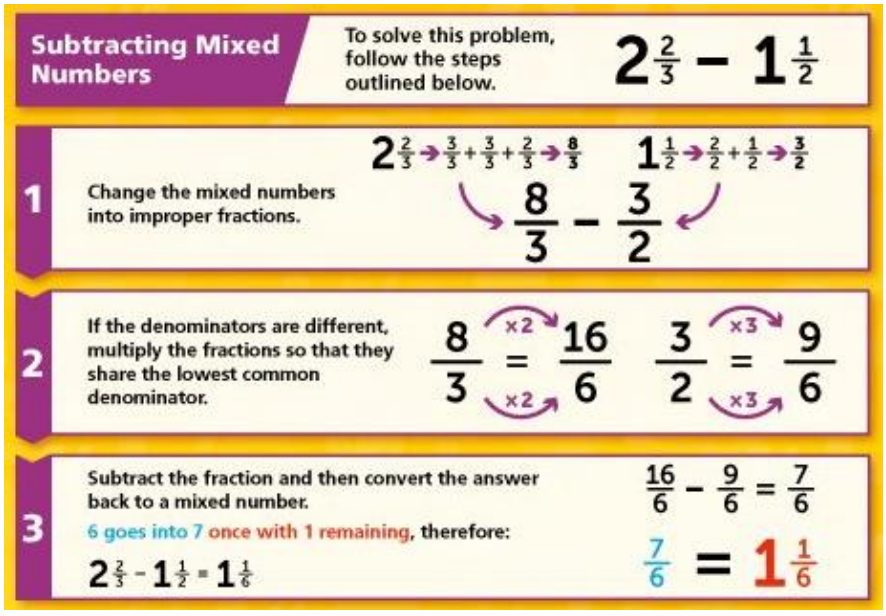


"If adding or subtracting is your aim, the bottom numbers must be the same. Change the bottom using multiply or divide, but the same to the top must be applied. And don't forget to simplify, before it's time to say goodbye."

Section 6 — Adding and Subtracting Mixed Numbers

When adding and subtracting mixed numbers, **first change the mixed numbers to improper fractions** before adding or subtracting as normal. Remember to **convert the answer back to a mixed number**.



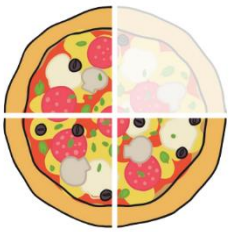


Try these methods with some of your own examples.

Show your workings to ensure this knowledge is secure.

Section 1—Fractions and Equivalent Fractions

A fraction is a number that expresses equal parts of a whole amount.



$\frac{3}{4}$

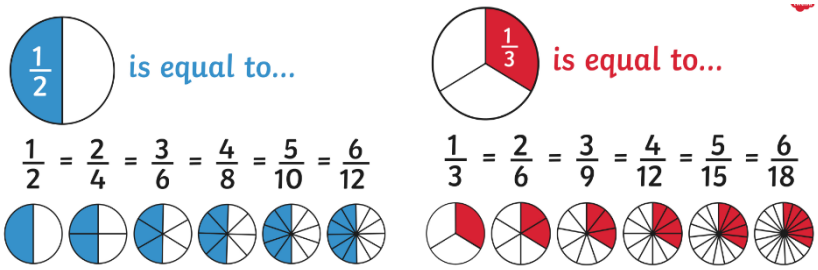
Numerator
How many equal parts do you have?

Denominator
How many equal parts is the whole divided into?

Unit fractions are any fraction whose numerator is 1.

$\frac{1}{4}$ $\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{16}$

Equivalent fractions are fractions which have the same value but look different.



Section 2—Improper Fractions and Mixed Numbers

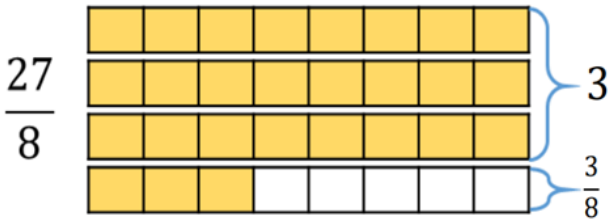
An **improper fraction** is where the numerator is bigger than the denominator.

$\frac{27}{8}$ ← numerator
$\frac{27}{8}$ ← denominator

A **mixed number** is a number consisting of an integer (whole number) and a proper fraction

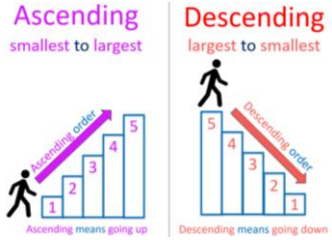
integer → $3\frac{3}{8}$ ← numerator
$3\frac{3}{8}$ ← denominator

We can convert improper fractions into mixed numbers (and vice versa).

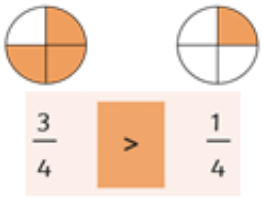


Section 3—Comparing and Ordering fractions

Comparing To look at two or more numbers to decide which is **greater (>)**, **lesser (<)** or if they are **equal (=)**
Ordering Putting things in the correct place following a rule e.g. Order from smallest to largest

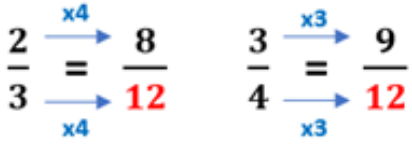


If the fractions have the same denominator…
Then you just compare the numerators.



If the fractions have different denominators… $\frac{2}{3}$ $\frac{3}{4}$

1. You need to find a **common denominator**.
2. Then **multiply the numerator and denominator by the same number**.
3. Then compare the fractions once the denominators are the same.



$\frac{8}{12} < \frac{9}{12}$ so $\frac{2}{3} < \frac{3}{4}$