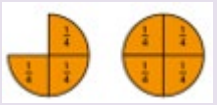
Fractions

Types of Fractions

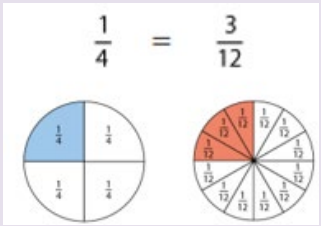


$\frac{7}{4}$

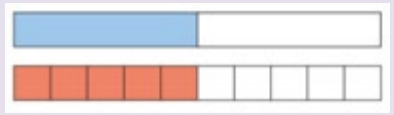
Improper fraction

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

Mixed number

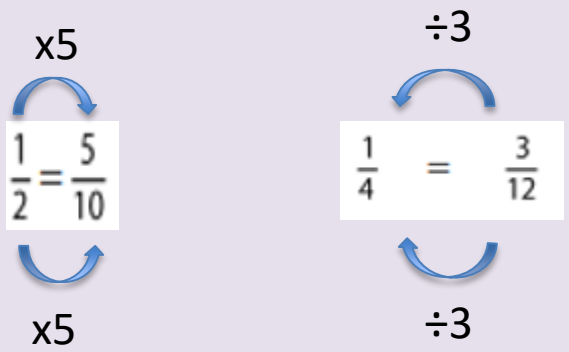


Equivalent fractions

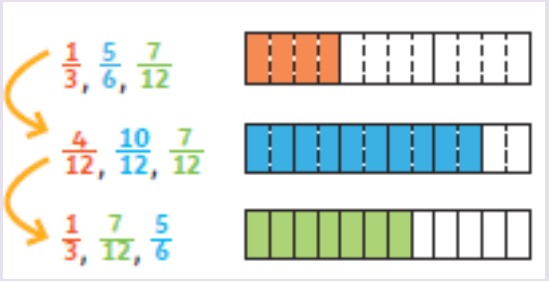


$\frac{1}{2} = \frac{5}{10}$

By multiplying or dividing the numerator and denominator by the same number, the new fraction will be an equivalent fraction



Compare and Order Fractions



Compare and order by using common denominators

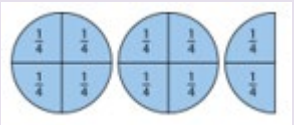
Convert between improper fractions and mixed numbers

Improper to mixed number

Divide the numerator by the denominator

7 ÷ 4 = 1 r 3

: 1 3/4



Mixed number to improper

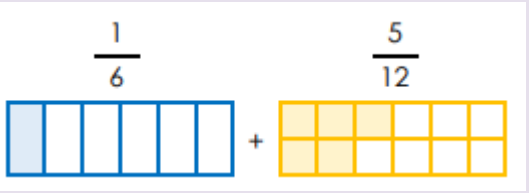
There are 4 parts in the whole

2 whole = 8/4 + 2/4 = 10/4

Vocabulary

numerator	Top number in a fraction. Shows how many parts we have
denominator	Bottom number in a fraction. Shows how many equal parts in the whole
common denominator	When the denominators of two or more fractions are the same
multiple	The result of multiplying a number by an integer
equivalent fractions	Fractions that have the same value but look different
proper fraction	The numerator is less than the denominator – value is less than 1 whole
improper fraction	The numerator is greater than the denominator – value is greater than 1 whole
mixed number	A whole number and a fraction part

Adding Fractions



We need to have a common denominator to be able to add and subtract

$\frac{1}{6} = \frac{2}{12}$

$\frac{2}{12} + \frac{5}{12} = \frac{7}{12}$

$2\ \frac{2}{15} + 4\ \frac{2}{3} =$

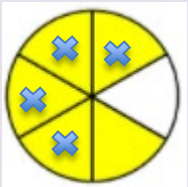
$2 + 4 = 6$

$\frac{2}{15} + \frac{10}{15} = \frac{12}{15}$

$= 6\ \frac{12}{15}$

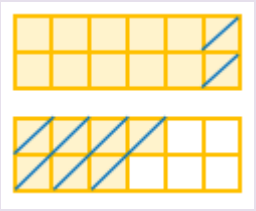
For mixed numbers, add the whole numbers then the fraction parts

Subtracting Fractions



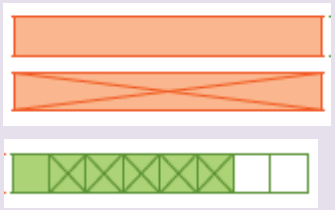
$\frac{5}{6} - \frac{2}{3} =$

$\frac{5}{6} - \frac{4}{6} = \frac{1}{6}$



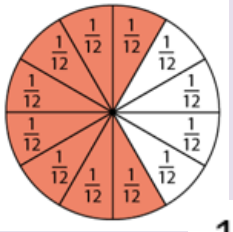
$1\frac{7}{12} - \frac{3}{4} = 1\frac{7}{12} - \frac{9}{12}$

$= \frac{10}{12}$



$2\ \frac{3}{4} - 1\ \frac{5}{8} = 1\ \frac{1}{8}$

Multiplying Fractions by an Integer



$\frac{1}{12} \times 8 = \frac{8}{12}$

$4 \times \frac{2}{9} = \frac{8}{9}$

$3\ \frac{1}{5} \times 4 =$

$3 \times 4 = 12$

$\frac{1}{5} \times 4 = \frac{4}{5}$

$= 12\ \frac{4}{5}$

For mixed numbers, multiply the whole numbers then the fraction part