



Mathematics Knowledge Organiser

Y5: Fractions

Proper Fractions

A fraction is a **part of a whole**.



1 → numerator = number of parts referred to

5 → fractions bar = divided by / out of

→ denominator = total number of parts whole

Unit fraction = numerator is one e.g. $1/4$, $1/3$, $1/2$.

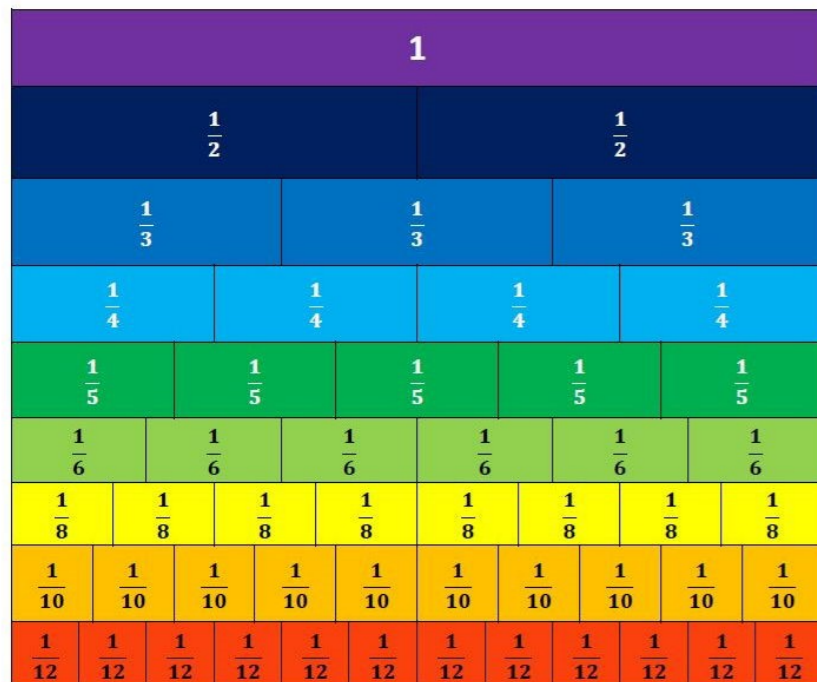
= **one part** out of the whole.

Non unit fraction = numerator is not one e.g. $3/5$.

= more than one part out of the whole.

Equivalent Fractions

Different fractions that have the **same value**



Improper Fractions and Mixed Numbers

$$\frac{11}{7} = 1 \frac{4}{7} =$$

Proper fraction = numerator is smaller than denominator (<1)

Improper fraction = numerator is larger than denominator (>1)

Mixed number = a whole number and a fraction (>1)

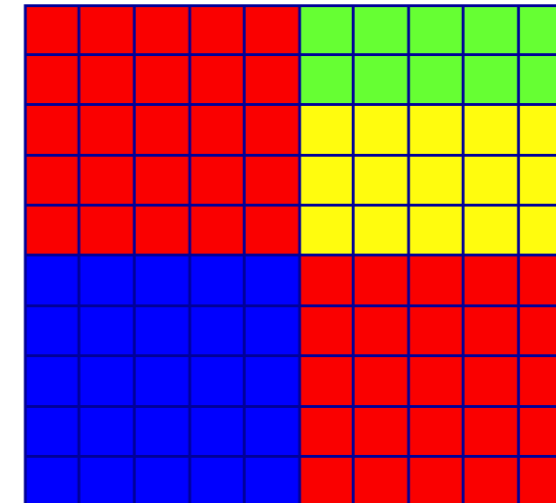
Decimals

Ones	.	Tenths	Hundredths	Thousandths
1	•	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
2	•	1	2	9
“two	point	one	two	nine”

$$\begin{array}{r} 1.42 \\ +2.38 \\ \hline 3.50 \end{array} \quad \begin{array}{r} 3.742 \\ -1.700 \\ \hline 2.042 \end{array}$$

When adding and subtracting decimal numbers, **line up** the decimal points.

Percentages



Percent = number of parts per 100

50% red

25% blue

15% yellow

10% green

Equivalent Fractions, Decimals and Percentages

Fraction	Decimal	Percentage
$1/2$	0.5	50%
$1/4$	0.25	25%
$3/4$	0.75	75%
$1/10$	0.1	10%
$1/5$	0.2	20%
$2/5$	0.4	40%
$3/5$	0.6	60%
$4/5$	0.8	80%