Fractions, Decimals, Percentages

Fractions, decimals and percentages are all ways of showing numbers which are not whole, but 'parts' of numbers, shapes or quantities.

Fractions	$\frac{3}{4}$ $\frac{1}{2}$ $\frac{2}{3}$ $\frac{5}{8}$ $\frac{1}{4}$	Fractions indicate parts or portions of a shape, number or quantity. The bottom number (denominator) indicates the number of segments/ parts something is 'split' into. The top number (numerator) indicates how many of those parts are involved
Decimals	0.2 0.25 0.294 0.83 £3.57	Decimal fractions have place value, getting smaller by a tenth as they move away from the decimal point. The first decimal place (next to the point) has a value of tenths; the next, hundredths etc. They are commonly used for measures, including money.
Percentages	50% 10% 100% 2.5% 200%	Percentages indicate parts of 100. 1% is one hundredth of a quantity, so 50% indicates one half. They are closely related to decimals to 2 decimal places.

Vocabulary

fraction
decimal
percentage
decimal place
numerator
denominator

part
portion
proportion

half, quarter, third, fifth etc
tenth
hundredth

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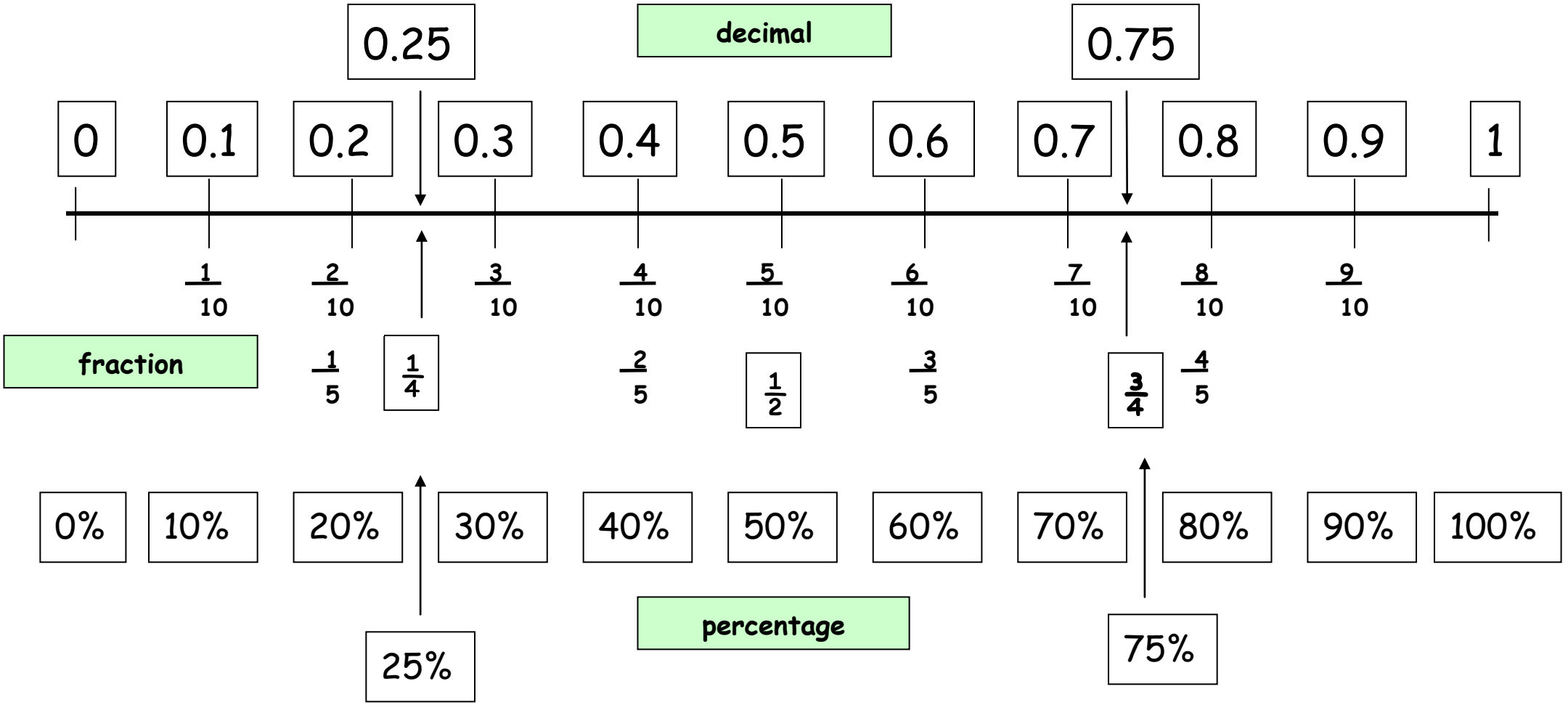

Equivalent Fractions, Decimals and Percentages

Fraction	Decimal	Percentage
$\frac{1}{2}$	0.5	50%
$\frac{1}{4}$	0.25	25%
3/4	0.75	75%
1/3	0.333…	33.33… %
2/3	0.666…	66.66… %
1/5	0.2	20%
2/5	0.4	40%
3/5	0.6	60%
1/6	0.166…	16.66 %
1/8	0.125	12.5%
1/9	0.111…	11.11%
5/9	0.555…	55.55%
1/10	0.1	10%
2/10	0.2	20%
3/10	0.3	30%
1/20	0.05	5%
1/25	0.04	4%
1/50	0.02	2%
1/100	0.01	1%

Equivalent Fraction Grid

Highlight two numbers in the first column to make any fraction.

Highlight two numbers in the same rows, which are both in the same column (to make the 4 corners of a rectangle).

These two will make an equivalent fraction.

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

1/5 = 9/45 2/7 = 12/42

To make equivalent fractions multiply the numerator and the denominator by the same number.