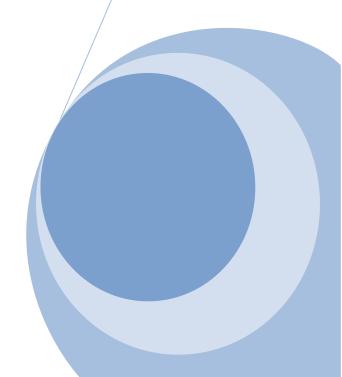


anymore.

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Glossary of terms:

Words for add: total, sum, add, addition, how many altogether

Words for take away: subtract, the difference, between, are left, how many more

Words for times: multiply, multiplication, product, how many altogether

Words for share: divide, quotient, share, split

Averages: Mean average (add all the numbers up and divide by the number of

numbers)

eg: $3,6,7,5,4 \longrightarrow (3+6+7+5+4)/5 = 25/5=5$

Mode average (which number occurs most often)

eg: 5,7,8,6,4,6,4,6,7,7,5,6,7,8 --> Mode is 6 and 7 as both

these occur four times.

Median (Put numbers in order and it is the middle number(cross

numbers out from each end))

eg: 5,7,2,7,4,8,3,7,10 --> 2,3,4,5,<mark>7,7,7,8,10 (odd number of</mark>

numbers)

eg: 5,7,2,7,4,8,3,7,6,10 --> 2,3,4,5,<mark>6,7</mark>,7,7,8,10 (even number

of numbers) --> (6+7)/2 = 13/2 = 6.5 which is the answer.

Other statistics Set A group of numbers (often with something in common).

Maximum The highest number in a set.

Minimum The lowest number in a set.

Range Maximum - minimum = range

Real numbers
Numbers that can be placed along a number line. The can be whole

numbers or decimal fractions.

Integers Whole numbers which includes both positive and negative numbers.

eg ..., -7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, ...

Natural numbers The set of integers that begin at 1, 2, 3, 4, ... (Note that Natural numbers do

not include zero or any minus numbers).

Rational numbers
Numbers that can be expressed as p/q where p and q are integers.

Irrational numbers
Numbers that have no repeating decimal component.

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Identity

A number which does not change a particular answer under a specific

operation.

eg: 1 is the identity for multiplication and division as g×1=g

0 is the identity for addition and subtraction as g+0=g

index The number of the power. The index is highlighted below.

eg: $5^2 = 5 \times 5 = 25$.

base The number to which the index applies. The base is highlighted below.

eg: $5^2 = 5 \times 5 = 25$.

fraction a number of the form a/b

Numerator The top number in a fraction

Denominator The lower number in a fraction

Calculating Fractions Multiplication

$$\frac{a}{b} \times \frac{c}{d} = \frac{a \times c}{b \times d}$$

Division

$$\frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \times \frac{d}{c} = \frac{a \times d}{b \times c}$$

Addition

$$\frac{a}{b} + \frac{c}{d} = \frac{(a \times d) + (b \times c)}{b \times d}$$

Subtraction

$$\frac{a}{b} - \frac{c}{d} = \frac{(a \times d) - (b \times c)}{b \times d}$$

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Improper fractions

These are where the number at the top (numerator) is greater than the number at the bottom (denominator).

Something to remember

$$23 = \frac{23}{1}$$

Geometry: There are 360° in a complete turn and 90° in a right angle.

Parallel: A word describing two lines as being the same distance

apart along their complete length. Parallel lines never meet.

Think of railway lines.

Perpendicular: A word describing two lines as being at right angles to one

another.

Triangles: Equilateral triangles have three equal length sides and three

angles which each measure 60°.

Isosceles triangles have two sides and two angles that are

the same and one that is different.

Scalene triangle have all three sides of different lengths.

Right-angled triangles could be scalene or isosceles

triangles. They have one right angle.

Quadrilaterals: Each has four sides and the sum of the internal angles is

360°. There are various forms of quadrilateral:

Rectangle: Quadrilateral with four right angles.

Square: Rectangle with four equal sides.

Oblong: Rectangle with two long sides (which are opposite one

another) and two short sides (which are also opposite one

another).

Rhombus: A four sides shape where all the sides are the same length.

A rhombus has no right angles.

Kite: A quadrilateral with two sets of two adjacent sides of the

same length. The diagonals intercept at right angles.

Trapezium: A quadrilateral with two parallel sides and two sides which

are not parallel.

Parallelogram: Four sided shape where opposite sides are parallel to one

another.