

These are the main number types:

integers, natural, prime, rational, irrational, square, surds, real, square, factors

INTEGERS

-3, -2, -1, 0, 1, 2, 3 ... Integers - zero, positive and negative WHOLE numbers.

NATURAL NUMBERS

Natural numbers are POSITIVE integers

2, 5, 8, 93, 37, 29 ...

PRIME NUMBERS

Prime Numbers can only be divided by themselves and '1' .

3, 5, 7, 11, 13, 17, 23, 29

RATIONAL NUMBERS

All Rational numbers can be WRITTEN AS FRACTIONS, where the top number (numerator) and bottom number (denominator) are whole numbers

$\frac{5}{6}$, $\frac{9}{5}$, $\frac{11}{3}$, $\frac{12}{7}$, $\frac{8}{6}$, $\frac{24}{10}$...

Where a decimal number is concerned, there is some pattern in the numbers after the decimal point. In this case we call the decimal 'recurring'. By convention the repeated numbers have a dot placed above them.

IRRATIONAL NUMBERS

Irrational Numbers cannot be written as fractions. Irrational numbers have no pattern in the numbers after the decimal point. The numbers go on randomly.

e.g. 5.9384756210029183744121

SQUARE NUMBERS

A square number is produced when a number is multiplied by itself.

25, 16, 36, 9 are squares of 5, 4, 6, 3 respectively

SURDS

Surds are positive or negative numbers with a square root sign in front of them.

REAL NUMBERS

These are all the types of number discussed here. If you take your studies further to A-level, you will learn about VIRTUAL NUMBERS. These are to do with the square root of -1.

FACTORS

Factors are numbers that can divide exactly into other numbers without leaving a remainder. For example, 5 is a factor of 35. It divides into it exactly 7 times.