

### **AUTHORS' NOTE**

We, the authors, having both taught for thirty years respectively in the senior primary phase, find a book of this nature a necessity in the classroom. In our experience all educators endeavour to establish a book wherein maths rules and terms are set out in a systematic manner. It is our belief that the Dawsan's maths dictionary is an indispensable reference which can be utilised by all learners. Parents, home tutors and homework facilitators will find this guide invaluable. It is user-friendly and comprehensive. With continuous use, re-inforcement of all relevant mathematical concepts and vocabulary will be assimilated. This dictionary will prove to be an indispensable component of our "Mental Challenge" booklets.

This book has been written as a useful aid for educators, parents, home tutors and homework facilitators.

**RATIO** : A ratio shows the relative sizes of two or more values.

Ratios can be shown in different ways. Using the “;” to separate example values, or as a single number by dividing one value by the total.

Example : If there is 1 boy and 3 girls you could write the ratio as:

1 : 3 (for every one boy there are three girls)

To find the denominator of the fraction add the two values given i.e.  $1+3=4$

$\frac{1}{4}$  are boys and  $\frac{3}{4}$  are girls

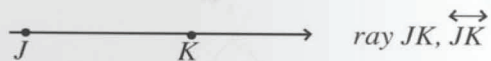
0,25 are boys (by dividing 1 by 4)

25% are boys (0,25 as a percentage)

**RATIONAL NUMBERS** : A set of numbers which includes all numbers and all proper, improper and mixed fractions, either positive or negative.

**RAY** : A part of a line that has one end point and goes on forever in only one direction.

Example :



**RECIPROCAL** : One of two numbers whose product is 1.

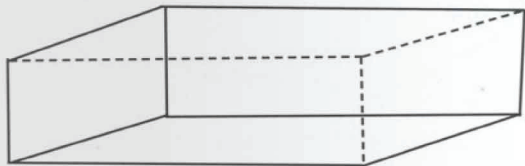
Example :  $\frac{2}{3} \times \frac{3}{2} = 1$

Therefore  $\frac{3}{2}$  is the reciprocal of  $\frac{2}{3}$

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**RECTANGULAR PRISM** : A solid figure in which all six faces are rectangles.

Example :



**RECURRING DECIMAL** : A decimal in which one or more digits repeat endlessly.

Example : 0,333 ... or  $0,\dot{3}$  or  $0,\bar{3}$

5,272727 ... or  $5,\dot{2}\dot{7}$  or  $5,\overline{27}$

**REMAINDERS** : The actual value of a remainder on a calculator is not reflected as it divides to the last decimal place. If asked to find the true remainder proceed as follows :

Example :  $123 \div 5 = 24,6$  (calculator display)

↓   ↓   ↓

*Dividend   divisor   quotient*

Step One : Multiply the divisor by the whole numbers in the quotient.

$$5 \times 24 = 120$$

Step Two : Subtract the above result from the dividend.

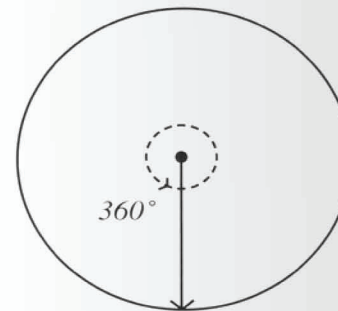
$$123 - 120 = 3$$

↓

*Actual remainder*

**REVOLUTION** : The distance covered by a ray from the centre of a circle from start to finish.

Example :



**RHOMBUS** : See Quadrilaterals.

**RIGHT ANGLE** : See Angles.

**RIGHT ANGLED TRIANGLE** : See Triangles.