

Mathematics Vocabulary: Four operations

Addition Words

- Add
- Plus
- Increase
- Altogether
- Both
- In all
- Sum
- Total

Subtraction Words

- Subtract
- Take Away
- Deduct
- Difference
- Fewer
- How many more
- How much more
- Left
- Less: Debra bought apples for \$3.20 and oranges for \$4.23. How much **less** did the apples cost?
- Minus
- Need to
- Remains
- Subtract
- Words ending with "er"; higher, longer, faster, heavier, larger, shorter, slower, farther, etc. Example: Jean's apple weighs 100 grams, and Karen's apple weighs 80 grams. How much **heavier** is Jean's apple?

Multiplication Words

- Multiply
- Product
- By
- Lots Of
- Times: Maria ran around the track 5 times. It took her 5 minutes to run around the track. How many minutes did she run?
- Every: Kim buys 2 apples everyday. How many apples does she buy in a week?
- At this rate: Ed reads 25 words per minute. At this rate, how many words does he read in one hour?

Division Words

- Divide
- Quotient
- Goes Into
- How Many Times
- Each: Ken has 75 pencils and 15 boxes. How many pencils should he pack in **each** box so each customer gets the same number of pencils?

Images: <http://www.mathsisfun.com/>

Addition is ...

... bringing two or more numbers (or things) together to make a new total.

Addition:

The numbers to be added together are called the "Addends":

$$8 + 3 = 11$$

Diagram illustrating addition: 8 (Addend) + 3 (Addend) = 11 (Sum). Arrows point from 8 and 3 to the plus sign, and from the plus sign to 11.

Subtraction is ...

... taking one number away from another.

$$8 - 3 = 5$$

Diagram illustrating subtraction: 8 (Minuend) - 3 (Subtrahend) = 5 (Difference). Arrows point from 8 to the minus sign, and from the minus sign to 5.

Minuend - Subtrahend = Difference

Minuend: The number that is to be subtracted from.

Subtrahend: The number that is to be subtracted.

Difference: The result of subtracting one number from another.

Multiplication is ...

.. (in its simplest form) repeated addition.

Multiplication:

Here we see that $6+6+6$ (three 6s) make 18

It could also be said that $3+3+3+3+3+3$ (six 3s) make 18

$$6 \times 3 = 18$$

Diagram illustrating multiplication: 6 (Factor or Multiplier) × 3 (Factor or Multiplicand) = 18 (Product). Arrows point from 6 and 3 to the multiplication sign, and from the multiplication sign to 18.

But you can also multiply by fractions or decimals, which goes beyond the simple idea of repeated addition:

Example: $3.5 \times 5 = 17.5$

which is 3.5 lots of 5, or 5 lots of 3.5

Division is ...

... splitting into equal parts or groups. It is the result of "fair sharing".

Division has its own special words to remember.

Let's take the simple problem of dividing 22 by 5. The answer is 4, with 2 left over. Here we illustrate the important words:

$$5 \overline{) 22} \begin{array}{l} 4 \\ \underline{20} \\ 2 \end{array}$$

Diagram illustrating division: 5 (Divisor) divides 22 (Dividend) to get 4 (Quotient) and 2 (Remainder). Arrows point from the labels to the corresponding parts of the division problem.

Which is the same as:

$$22 \div 5 = 4 \text{ R } 2$$

Diagram illustrating division: 22 (Dividend) ÷ 5 (Divisor) = 4 (Quotient) R 2 (Remainder). Arrows point from the labels to the corresponding parts of the division problem.