

Algebra as another Language

English

Algebra

Uses...

Letters and Symbols

Letters, Numbers and Symbols

Examples: a, b, c... x, y, z & “ “ ? !

Examples: a, b, c... x, y, z, 0, 1, 2, 3, ... (), +, -, X, ÷, !

To make...

Terms (Words)

Terms

a, eh?, aye, hey!, algebra, psychedelic,
and many others...

x, 7x, $6x^2$, $2a^2b^3y$, and many others...

Which make...

Phrases (Expressions)

Expressions

Seven increased by some number
Five less than some number
Twice the square of a number
Half the sum of a number and six

$7 + n$
 $m - 5$
 $2x^2$
 $\frac{(n + 6)}{2}$

Which become...

Sentences

Equations (or inequalities)

Seven increased by some number is twelve.
Five less than some number is nine.
Twice the square of a number is 32.
Half the sum of a number and six is ten.

$7 + n = 12$
 $m - 5 = 9$
 $2x^2 = 32$
 $\frac{(n + 6)}{2} = 10$

And just as there are many types of sentences (declarative, imperative, interrogatory, simple, compound, and complex), there are many types of equations (one-step to multi-step, open, or formula).