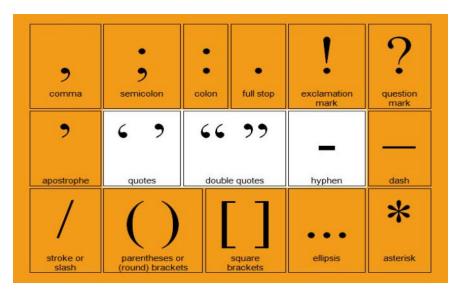
Punctuation marks



Digits and figures

- a digit
- single digit numbers: 1, 2, up to 9
- double digit numbers: 11, 26,
- a figure is a single digit in a given number. 25,690 has . . . figures. It is a number.

If a person says he/she gets a six-figure salary, we usually talk about yearly earnings above \$100,000 and below \$1,000,000

brackets : $()\{\}[]\langle\rangle$

from french braguette

- () round brackets, or parentheses
- [] square brackets
- \bullet $\langle \rangle$ angle brackets, no use in highschool maths.
- \bullet {} curly brackets, like in curly hair, used to describe \mathbf{sets}

we say

- curly hair = cheveux bouclés
- a makeup set = ensemble/kit de maquillage
- a theater set = $d\acute{e}cors$ de $th\acute{e}atre$

sets; whole numbers are positive integers

- counting numbers $\mathbb{N}^* = \{1, 2, 3, \ldots\}$
- whole numbers : $\mathbb{N} = \{0, 1, 2, 3, \ldots\}$
- integers $\mathbb{Z} = \{ \dots -3, -2, -1, 0, 1, 2, 3, \dots \}$
- \bullet decimals \mathbb{D}
- ullet real numbers ${\mathbb R}$

be accurate: in french whole numbers are nombres entiers positifs

even or odd numbers

- \bullet even numbers 2, 4, 6,... can be divided exactly by two.
- odd numbers 1, 3, 5,... are numbers that will have a remainder of 1 when divided by 2.

Non-mathematics use:

- He was perfectly relaxed, speaking in an **even** tone (calm and controlled)
- The room is kept at an **even** temperature (not changing)
- There is something **odd** about him. (*strange*, *unusual*)
- an **odd**-looking house
- the **odd** one out (*l'intrus*)

a factor and a multiple

- 4 is a factor of 12.
- 3 is a prime factor of 12.
- a prime number has exactly two factors.
- $12 = 4 \times 3$ is a composite number
- 12 is a multiple of 3
- $2 \times 2 \times 3$ is a prime **factorization** of 12.

be aware words with **-ise**, **-ize** (**-isation**, **-ization**): prioritize, mischaracterize, deinustrialize, conceptualize, hypersensitized Oxford english dictionary recommends using **-ize** which has proper latin origin (while -ise is correct, but comes from the French).

How can you identify two-digit prime numbers?



The sieve of Erathostenes le crible d'Erathostène
If a two-digit number is not a multiple of 2, 3, 5 or 7, then it is a prime num-

Obviously, if any number is a multiple of 2, 3, 5 or 7, then it is not a prime number.

https://isthisprime.com/game/

in cooking: sifter (sieve) vs strainer





operations

- 2 + 2 "two plus two"
- 24 13 "twenty four minus thirteen"
- 12 7 "subtract seven from twelve"
- 13-5 "thirteen take away five"
- 15×17 "fifteen times seventeen", multiply is correct.
- $15 \div 3$ " fifteen divided by three"
- $\frac{15}{3}$ "fifteen over three"
- 3² "two squared"
- 5³ "five cubed"
- \bullet 4¹⁰ "four to the power 10"

This phone number called me three **times**.

substract is obsolete and erroneous: latin is subtractus.

Simple mathemagic trick : reading minds with your phone

- keep multiplying **single digits numbers** to get a big long number in the millions or billions.

 Pick them as **randomly** as possible.
- Chose a single digit of the result. Point at it and show it to your neighbour This is your secret digit.
- Tell me all the other digits.

a math puzzle

Using all caracters one time each, write down a true equation.

$$2 3 4 5 + =$$