

Numerals

1 Numerals are particles that express number. There are thirteen numerals in Esperanto:

2	nul	0
	unu	1
	du	2
	tri	3
	kvar	4
	kvin	5
	ses	6
	sep	7
	ok	8
	naŭ	9
	dek	10
	cent	100
	mil	1000

3 Other numbers are expressed using combinations of the numerals. Numbers are given using how many thousands, then how many hundreds, then how many tens, and finally, how many ones:

4	11	dek unu
	12	dek du
	13	dek tri
	14	dek kvar
	15	dek kvin
	16	dek ses
	17	dek sep
	18	dek ok
	19	dek naŭ
	20	dudek
	21	dudek unu
	22	dudek du
	23	dudek tri
	30	tridek
	40	kvardek
	50	kvindek

60	sesdek
70	sepdek
80	okdek
90	naüdek
100	cent
101	cent unu
110	cent dek
111	cent dek unu
200	ducent
232	ducent tridek du
300	trident
400	kvarcent
500	kvincent
600	sescent
700	sepcent
800	okcent
900	naücent
1000	mil
1001	mil unu
1011	mil dek unu
1111	mil cent dek unu
1234	mil ducent tridek kvar
2000	du mil
2678	du mil sescent sepdek ok
3000	tri mil
4000	kvar mil
5000	kvin mil
6000	ses mil
7000	sep mil
8000	ok mil
9000	naü mil
10000	dek mil
11000	dek unu mil
12000	dek du mil
20000	dudek mil

30000 tridek mil

42000 kvardek du mil

999000 naŭcent naŭdek naŭ mil

999999 naŭcent naŭdek naŭ mil naŭcent naŭdek naŭ

- 5 Tens and hundreds are written (and pronounced) together, as one word: **dudek**, **tridek**, **ducent**, **tricent** etc. Everything else should be written as separate words, including thousands.
- 6 Tens and hundreds, like other words, are pronounced with an accent on the second to last vowel: **dUdek**, **tridek**, **dUcent**, **tricent** Everything else is pronounced as separate words: **dEk dU**, **dEk trl**, **cEnt dU**, **cEnt trl**, **cEnt dEk dU**, **dU mil**, **trl mil**, **dU mil dEk dU**.
- 7 If a compound word is created from these basic numerical expressions, for example, **substantival number words** or **adjectival number words**, it is possible or obligatory to write the words joined together, with hyphens as necessary.
- 8 **Nul** (zero) was originally a noun: **nulo** (the name of the number 0). But it has been used for a long time as a numeral without an ending, like in: 0,5 = **nul komo kvin** (or **nulo komo kvin**).
- 9 In some cases the abbreviated form **un'** may be used instead of **unu**.

Use of numerals

- 10 Numerals most frequently appear as epithets of nouns. The numbers then don't receive the N or J endings:

Mi havas nur **unu buŝon**, sed mi havas **du orelojn**. - I have only one mouth, but I have two ears.

Li faris ĉion per la **dek fingroj** de siaj manoj. - He does everything with the ten fingers of his hands.

Li havas **dek unu infanojn**. - He has eleven children.

Sesdek minutoj faras **unu horon**, kaj **unu minuto** konsistas el **sesdek sekundoj**. - Sixty minutes makes one hour, and one minute consists of sixty seconds.

- 12 Sometimes the noun is omitted (but understood through context):

Nu, se vi ne havas **mil** [rublojn], mi petas cent rublojn. - Well, if you have a thousand [roubles], I'll ask for a hundred roubles.

Kiun el la **tri** [aferoj/personoj] vi elektas? - Which of the three [things/people] do you pick?

- 14 **Nul** (zero) normally appears as a numerical epithet only before units of measure:

La frostpunkto de akvo estas **nul gradoj** ĉe norma atmosfera premo. - The freezing point of water is zero degrees under normal atmospheric pressure.

We usually write **0 gradoj**, but pronounce it as **nul gradoj**.

Ilia fina rezulto estis **nul poentoj**. - Their final result was zero points.

16 In other instances, **neniu** (no, none, no one) is normally used: **Mi havas neniun malamikon**.

17 Numerals can also appear independently to fulfill various roles in a sentence. They often act as nouns. They are never used with the J or N endings:

18 **Kvin kaj sep faras dek du**. - Five plus seven equals twelve.

Tridek kaj kvardek kvin faras sepdek kvin. - Thirty plus forty-five equals seventy-five.

Ilia nombro estas **kvardek tri mil sepcent tridek**. - Their number is forty-three thousand seven hundred and thirty.

Divido per **nul** ne estas permesita. - Dividing by zero is not permitted.

Tri estas duono de **ses**. - Three is half six.

Sep estas sankta nombro. - Seven is a sacred number.

Mi legis numeron **2** de la jaro **1990**. - I read number 2 from the year 1990.

Referring to the number of a magazine.

Ni loĝas en ĉambro **tricent tridek tri** en tiu hotelo. - We are staying in room three hundred and thirty-three in this hotel.

19 When referring to a number, an **ordinal numeral** can also be used: **la dua numero**, **la jaro 1990-a**, **la tricent-tridek-tria ĉambro**. But there can be a difference between a number in an order and normal number. For example, **kvara** (fourth) means that the thing is preceded by three other things, while **numero kvar** (number four) means that the thing has the number 4 as a sort of "name". In hotels, for example, there are often missing numbers, so that room 100 is not necessarily the hundredth room. And when standing at the end of a street, one may say that house number one is not the first house, but the last.

Special uses of **unu**

20 The basic meaning of **unu** is numerical. This use has already been explained above together with the other numerals. But **unu** also has some special meanings and uses. **Unu** can express, among other things, **sameness**, **uniqueness**, **individuality**, and **identity**:

21 La loĝantoj de **unu** regno estas samregnanoj, la loĝantoj de **unu** urbo estas samurbanoj, la konfesantoj de **unu** religio estas samreligianoj. = La loĝantoj de unu sama regno... - The inhabitants of one nation are conationals, the inhabitants of one city are fellow urbanites, the people who share one religion are coreligionists.= The inhabitants of one and the same nation...

Ŝin trafis **unu** malfeliĉo post la alia. - She was hit by one misfortune after another.

Here **unu** stresses the distinctiveness of each misfortune. In this sense **unu** is often combined with **alia**.

En **unu** tago, kiam ŝi estis apud tiu fonto, venis al ŝi malriĉa virino. - One day, when she was by this well, a poor woman came to her.

This is found in the text of the book, but not in the dictionary. This is a special use of the numeral **unu**.

This refers to a day known to the speaker, but not to the listener. In this use **unu** is a [partially defining article](#).

22 **Unu** is also used individually without a noun to follow it. You might say that the noun is understood through context, but in some cases the addition of the noun would be bothersome. In those cases, **unu** is used as if it were a pronoun"

23 **Ŝi** estis **unu** el la plej belaj knabinoj, kiujn oni povis trovi. - She was one of the most beautiful girls, which one could find

Unu babilis, alia kantis. - One spoke, another sang.

24 When an **unu** is used to mark an individual, or used like a pronoun (or sometimes to show uniqueness), in the description of several individuals, it receives the J ending:

25 El ŝiaj multaj infanoj **unu****j** estas bonaj kaj aliaj estas malbonaj. - Of her many children some are good and others are bad.

Dum **unu****j** artikoloj alportas al nia afero rondon da novaj amikoj, multaj aliaj, skribitaj nelerte, tute perdiĝas sen rezultato. - While some articles bring to our enterprise a new circle of friends, many others, badly written, go to waste without any result.

Unu**j** [studentoj] kun gaja rideto sur la buŝo, aliaj meditante, aliaj en vigla interparolado, unuope aŭ duope forlasas la universitatan korton. - Some [students] with a happy smile on their lips, others meditating, others in lively conversation, leave the university grounds individually or in twos.

26 The form **unu** can't receive the N ending. This is a basic rule that is always valid, whether **unu** shows number, individuality, or uniqueness: **Unu** mi renkontis en Londono, alian en Parizo. Never use the form **unun**. But the form **unu****j** can receive the N-ending, because **unu****j** can never be a pure numeral. It always shows individuality or uniqueness. The form **unu****j****n**, however, is only very seldom needed: **Unu****j****n** mi renkontis en Londono, aliajn en Parizo.

27 The rule that forbids the use of **unun** but permits **unu****j****n** is strange from the viewpoint of logic. But it makes sense in view of practical use. In practice, the uses of **unu** to show number, uniqueness, and individuality are not clearly distinct from one another. There are many cases on the line, and for this reason, the simple rule that **unu** should never have an N-ending is very practical. It isn't necessary to decide in each and every case whether **unu** shows number, uniqueness, or individuality. **Unu****j** is, however, only used to show individuality or uniqueness, and therefore there is no problem with using the N-ending with it, if its role in the sentence requires that.

28 Don't confuse the use of **unu** to show individuality with the [table word](#) **iu** (some, someone). **Unu** showing individuality indicates that the speaker knows well which individual he is referring to (though the listener likely does not know). **Iu** shows that the identity of the individual being discussed is unknown or unclear, or that the identity isn't important.

29 Loĝas ĉi tie **unu** el viaj amikoj. - One of your friends live here.

The speaker knows which one of the friends live here.

Loĝas ĉi tie **iu** el viaj amikoj. - One of your friends live here.

The speaker doesn't(probably)know which one of the friends live here.

30 **Iu** (some) can often be used instead of **unu** (one) when it isn't important to show whether an individual is known to the speaker. But **unu** is more precise. It shows that the speaker already knows the identity.

31 The adjective **certa** (certain) sometimes has a meaning similar to the use of **unu** (one) to show an individual, but **certa** is stronger. It emphatically shows that something is certainly known to the speaker (but probably not to the listener): **certaj** okazoj multe da saĝo estas pli malbona, ol se oni ĝin tute ne havus. Hieraŭ vizitis min **certa** sinjorino Schmidt.

32 The abundance of uses for **unu** (one) seems strange to some, especially because textbooks rarely explain it. For that reason, many prefer to use **unu** in a purely numerical role, preferring use of **iu(j)** (some), **kelka(j)** (some, a few), and **certa(j)** (certain) for other uses. This usage diminishes the richness of the language, because all of these words express different nuances, and all of these nuances are needed.

Unu... la alia

33 Pronominal use of **unu** is part of the expression **unu... (la) alia** (one another), which shows reciprocity. **Unu... (la) alia** represents an entire abbreviated sentence. **Unu** normally is the subject in a complete sentence, and **(la) alia** is an object or has another role other than that of the subject:

34 Tiuj gejunuloj **amas unu la alian**. → Tiuj gejunuloj **amas**. **Unu** **amas la alian**. - All youngsters love each other. → All youngsters love. One loves the other. Each one of them loves each other one of them.

Ili donis florojn **unu al alia**. → Ili donis florojn. **Unu** donis florojn **al alia**. - They gave each other flowers. → They gave flowers. One gave flowers to the other. Each of them gave flowers to the others.

Li kunigis kvin tapiŝojn **unu kun la alia**. - He bound five carpets one to the other. [Exodus 36:10]
He put together one carpet with the other.

35 The expression **unu... (la) alia** (one another) may almost always be used without J-endings. When necessary, a J-ending can be added to **alia** (other) and also to **La junaj knabinoj kaj junuloj ĉe la lageto babilas unuj kun la aliaj**. **unu** **La registaroj ĵetas la homojn unujn kontraŭ la aliajn**. = **La registaroj ĵetas unujn homojn kontraŭ la aliajn homojn**. (one) depending on the intended meaning: **La junaj knabinoj kaj junuloj ĉe la lageto babilas unuj kun la aliaj**. Some of them speak with others of them. Sometimes the form **unujn** must be used: **La registaroj ĵetas la homojn unujn kontraŭ la aliajn**. = **La registaroj ĵetas unujn homojn kontraŭ la aliajn homojn**.

36 Instead of **unu... la alia** (one another), the word **reciproke** (reciprocally) can sometimes be used together with **si** or another pronoun: **La knabino kaj la knabo kisis sin reciproke**. = **La knabino kaj la knabo kisis unu la alian**. **Reciproke** can also be used together with **unu... la alia** to emphasize the reciprocity: **Vi ne estas reciproke egalaj unu al la alia en la regiono de la spirito**. The word **inter** can also be used like a prefix with a verb, often with **si** or another pronoun, or the expression **inter si** (between/among themselves) (**inter ni** (among us), **inter vi** (among you)), which always means **unu kun la alia** (with one another) or similarly: **Ili sin interaguzas**. = **Ili akuzas unu la alian**. **Ili interparolas**. = **Ili parolas unu kun la alia**. **Ili estis tre amikaj inter si**. The pronoun **si** should never be used together with **unu... la alia**. Don't say: ~~Ĝi amas sin unu la alian~~. Say simply: **Ili amas unu la alian**.

Substantival (noun type) number words

37 Number words with the suffix **ON** show fractional numbers:

38

38 **duono** = 1/2

triono = 1/3

dekono = 1/10

dekduono = 1/12

centono = 1/100

milono = 1/1000

39 Numbers higher than 999999 are expressed using substantival number words; that is, numbers in the form of a noun.

40 **miliono** 1.000.000 (six zeros)

miliardo 1.000.000.000 (= nine zeros)

biliono 1.000.000.000.000 (= twelve zeros)

triliono 1.000.000.000.000.000 (= eighteen zeros)

41 Some languages, for example English and Russian, give different meanings than Esperanto does to the number words **biliono** (billion) and **triliono** (trillion). The Esperanto words should only have the meanings shown above, and no others. There are also higher numbers that are words of this type, but they are very seldom used.

42 Substantival number words receive the J- and N-endings according to the same rules as other nouns:

43 **Kiam vi havos rikolton, vi donos kvinonon al Faraono.** - When you have the harvest, you will give the Pharaoh one fifth.

Mi ricevis dudek kvin centonojn. - I received twenty-five hundred.

Ŝi havas pli ol dek milionojn. - She has more than ten million.

La malprofito atingis sumon de kvardek sep miliardoj. - The loss came to the sum of forty-seven billion. [American billion, not British]

44 Number words in noun form can't directly describe a noun; they are used together with the preposition **da**:

45 **Li havas du miliardojn da dolaroj.** - He has two billion dollars.

Ŝi vidis pli ol dek milionojn da homoj. - She saw more than ten million people.

46 An ON-word with an O-ending also requires the help of a preposition: **Unu tago estas tricent-sesdek-kvinono aŭ tricent-sesdek-sesono de jaro.**

47 Numerals can also become nouns through the addition of an O-ending. In this form, they show a thing with a relation to a number, or a group with that many items. Numbers are always written together before an O-ending. For clarity, a dividing hyphen can be used where there would ordinarily be spaces:

48 **unu** → **unuo** = the digit 1, basic element of calculation, basic amount, (ie. meter, kilogram, ampere etc.)

du → **duo** = the digit 2, pair, couple

dek du → **dek-duo** aŭ **dekduo** = the number 12, group of 12 things

du mil kvincent → **du-mil-kvincento** (preferably not **dumilkvincento**)

Mi aĉetis dekon da ovoj kaj dek-duon da pomoj. - I bought a ten of eggs and a dozen apples.

Mixed numbers

49 When numerals are mixed with number words in noun form to make a number, their differing rules collide. Numerals want to be epithets of the primary word, while noun-type number words are themselves primary words followed by a **da** expression. Generally, the correct solution is to use **da** in these cases, because though **da** used together with numerals is rare, it is in no way wrong.

50 **Tie loĝas 1.500.000 homoj.** = **Tie loĝas unu miliono (kaj) kvincent mil da homoj.** - 1,500,000 people live there. = One million five hundred thousand people are housed there.

One could also say: **...unu kaj duona milionoj da homoj** (one and a half million people). Or: **...unu komo kvin milionoj da homoj** (one point five million people).

Mi havas unu milionon da eŭroj. **Se mi ricevos ankoraŭ unu eŭron, mi havos unu milionon unu da eŭroj.** - I have a million euros. If I receive another one euro, I'll have a million and one euros.

Li havas 10.300.978 \$. = **Li havas dek milionojn tricent mil naŭcent sepdek ok da dolaroj.** - He has \$10,300,978 = He has ten million three hundred thousand nine hundred and seventy-eight dollars.

Ili kostas kvar kaj duonan da dolaroj. - They cost four and a half dollars.

Another common and good solution is: **Ili kostas kvar kaj duonan dolarojn** (They cost four and a half dollars).

Adjectival number words

51 If the A ending is added to a numeral, an adjective is created, showing the number's position in an order, or an **ordinal numeral**:

52

unua = in first position in a lineup

dua = in the second position in an order (having one before it)

tria = in position number three (having two in front of it)

kvara = in position four in a lineup (having three before it)

deka = in the tenth position in order (having nine before it)

53 Ordinal numerals receive a J-ending and an N-ending just as ordinary adjectives do:

54 La **sepan** tagon de la semajno Dio elektis, ke ĝi estu pli sankta, ol la ses **unuaj** tagoj. - God chose the seventh day to be holier than the first six days.

55 If an A-ending is added to a number with several words, the entire expression can be combined into one word, but the words can also be left separate. In any case, the A-ending is always placed only at the end. If a combined form is used, hyphens can be used to divide the components of the words for clarity. The hyphens should be placed where there are spaces in the original multi-word number:

56 Hodiaŭ estas la **dudek sepa** (tago) de Marto. = ...dudek-sepa... - Today it is the twenty-seventh (day) of March = ...twenty-seventh...
(or ...twenty-seventh...)

Georgo Vaŝington estis naskita la **dudek duan** de Februaro de la jaro **mil sepcent tridek dua**. = ...dudek-duan... mil-sepcent-tridek-dua. - George Washington was born on the twenty-second of February in the year 1732.

Instead of **dudek-duan** you can also write **dudekduan**, but instead of **mil-sepcent-tridek-dua** don't write **milsepcenttridekdua**, because that would be too unclear.

Tio okazis en la **okdekaj** jaroj. = ...iam en la jaroj de 1980 ĝis 1989 inkluzive. - This happened in the eighties. = ...sometime in the years from 1980 to 1989 inclusive.

Ŝi estas la **dua** plej bona en nia klaso, kaj mi estas la **tria**. - She is the second best in our class, and I'm the third.
Just one is better than us.

57 When an ordinal expression is used alongside an ordinary numeral, the ordinal expression should come first for clarity:

58 Tio okazis iam en la **unuaj dek** tagoj. - That happened sometime in the first ten days.

If one were to say **la dek unuaj tagoj** there is the danger that one might take **dek** to be part of the ordinal expression, in other words as if to say **la dek-unuaj tagoj**.

Other number words with the A-ending

duona = having only half of its full height

triona = having only a third of its full size

centona = having only one hundredth of its full size.

Ĝi estas longa je **duona** metro. - It is half a meter in length.

Its length is 50 centimeters.

Kvaronan horon li restis. - They stayed for a quarter of an hour.

He remained fifteen minutes.

Miliona (millionth), **miliarda** (billionth), etc. are ordinary adjectives, with may theoretically have various meanings according to context. But in practice, they are used almost exclusively to show order in a sequence: **Nia miliona kliento ricevos specialan donacon.**

The word **nula** is an ordinary adjective that theoretically may be used with various meanings, according to context, including with an ordinal meaning (nula = zeroth): **je la nula horo kaj tridek minutoj**. In practice, it is almost only used with the meaning "non-existent, worthless, invalid": **Bruo potenca, nula esenco.**

Ordinal adjectives from **mixed numbers** are theoretically possible, but hardly recommended: **nia du-milion-unua kliento**. Expressions with a **numeral** should be used instead: **nia kliento numero du milionoj unu.**

Adverbial number words

Number words with an E-ending have the same meanings as th corresponding **adjective forms**:

unue = in the first position

due = in the second position.

dek-due, dek due = in the 12th position

Unue mi redonas al vi la monon, kiun vi pruntis al mi; **due** mi dankas vin por la prunto; **trie** mi petas vin ankaŭ poste prunti al mi, kiam mi bezonos monon. - In the first place I'm giving back the money which you lent me; secondly I thank you for the loan; thirdly I ask that you will also lend me money later when I need it.

Ĝi estas **trione** el plasto, **trione** el ligno kaj **trione** el metalo. - It is one third plastic, one third wood and one third metal.

Tiu monto estas eĉ ne **centone** tiel alta kiel Ĉomolungmo. = La alteco de tiu monto estas eĉ ne unu centono de la alteco de Ĉomolungmo (= Everesto). - This

Nuanced use of number words

67 The prepositions **ĝis**, **inter** and **po** can be used with number words to add nuance in various manners:

68 Restas **ĉirkaŭ dek** personoj. = Restas proksimume dek personoj. - About ten people remain. = There are approximately ten people left.

Ĝis ducent homoj povas eniri. = Maksimume ducent homoj povas eniri. - Up to two hundred people can enter. = A maximum of two hundred people can enter.

Ili kostas **de kvin ĝis dek** eŭrojn. = Ili kostas minimume kvin kaj maksimume dek eŭrojn. - They cost from five to ten euros. = They cost at least five and at most ten euros.

Mi vidis **inter cent kaj ducent** homojn. = Mi vidis minimume cent kaj maksimume ducent homojn. - I saw between one hundred and two hundred people. = I saw at least one hundred and at most two hundred people.

Aranĝu ilin en du vicoj, **po ses** en vico. = Aranĝu ilin en du vicoj, ses en ĉiu vico. - Arrange them in two rows, six to a row. = Arrange them into two rows, with six in each row.

69 In these sentences, the prepositions don't concern the noun that follows at all; they have meaning only for the number. If the number word is removed, the nuance marker must also disappear, because it no longer makes sense.

70 Restas **ĉirkaŭ dek** personoj. → Restas personoj. - About ten people remain. → People are remaining
(Restas ~~ĉirkaŭ~~ personoj has no meaning.)

Mi vidis **inter cent kaj ducent** homojn. → Mi vidis homojn. - I saw between a hundred and two hundred people. → I saw people.
(Mi vidis ~~inter~~ homojn does no make sense.)

71 These prepositions don't mark a role in a sentence when they add nuance to numbers. They are not role markers, but they have an adverbial sort of role: **ĉirkaŭ** = proksimume; **de** = minimume; **ĝis** = maksimume.

72 Words used to add nuance to number words can be used together with true role markers, which show the role of the whole expression in the sentence:

73 Ĝi estis virino, kiu povis havi la aĝon **de ĉirkaŭ sesdek** jaroj. - It was a woman, who might have been about sixty years old.

Ĉirkaŭ concerns only the number **sesdek**. **De** shows the role indicator of the whole expression **ĉirkaŭ sesdek jaroj**.

Nenie en la **ĉirkaŭ cent** jaroj la loko estis pli ŝanĝita, ol en unu malgranda frukta ĝardeno. - Nowhere in a hundred years or so, has the place changed as much as in

one small fruit garden.

The circumstantial complement of time has the preposition **en**. **Ĉirkaŭ** only gives a nuance to the number **cent**.

Ili loĝos tie **de ok ĝis naŭ** jarojn. - They will live there for eight to nine years.

The phrase is a circumstantial complement of duration which must have a role indicator. Here it has the N-ending. **De kaj ĝis** only refines the numbers.

Estis tiel malvarme, ke ili devis kuŝi sub **po tri** kovriloj. - It was so cold that they had to sleep under three blankets each.

The phrase **sub po tri kovriloj** is a circumstantial complement of location introduced by **sub**. **Po** only gives a nuance to **tri**.

Li havas **ĉirkaŭ mil** eŭrojn. - he has about a thousand euros.

The object **ĉirkaŭ mil eŭrojn** requires the N-ending. **Ĉirkaŭ** only gives a nuanced meaning to the number **mil**.

74 In these sentences, these particles are only used to add nuance, and are not used as prepositions — with the exception of **po** (at a rate of). The language's use of **po** varies. Some use **po** always as a true preposition, which means that they never use an N-ending together with **po**, even if that part of the sentence takes the role of an object in the sentence; for example, in **Mi donis al ili po dek eŭroj**. Other use **po** only adverbially, and add an N-ending when its role in a sentence requires that, like in **Mi donis al ili po dek eŭrojn**.. Both uses are considered correct and appropriate for use.

Mathematical expressions

Formula	Pronunciation
$2 + 2 = 4$	Du kaj du faras kvar. / Du plus du estas kvar.
$10 - 3 = 7$	Dek minus tri faras sep.
$22 \times 6 = 132$	Dudek du multiplike per ses faras cent tridek du. / Dudekduoble ses estas cent tridek du. / Dudek du oble ses egalas al cent tridek du.
$7:2 = 3,5$	Sep dividite per du faras tri komo kvin.
46,987	kvardek ses komo naŭ ok sep (no ...komo naŭcent okdek sep)
$10^2 = 100$	La dua potenco de dek estas cent. / Dek kvadrato estas cent.
$5^3 = 125$	La tria potenco de kvin estas cent dudek kvin. / Kvin kube estas cent dudek kvin.

76 Kvin kaj sep faras dek du. - Five plus seven equals twelve.

Dek kaj dek faras dudek. - Ten plus ten equals twenty.

Kvar kaj dek ok faras dudek du. - Four plus eighteen equals twenty-two.

Tridek kaj kvardek kvin faras sepdek kvin. - Thirty (30) and forty five (45) make seventy five (75).

Kvinoble sep estas tridek kvin. - Five times seven equals thirty five.

77 An equal sign (=) can be pronounced as **faras** (makes) or **estas** (is) or **egalas (al)** (equals [to]), more or less according to the preference of the speaker: **du kaj du faras kvar, dek minus tri estas sep, du oble du egalas (al) kvar.**

78 Don't use a period (full stop) instead of a comma with decimals. A period is used as a decimal sign in a few countries. But Esperanto, like most countries and languages, uses a comma to mark decimals.

79 **Formula** **Pronunciation**

9403,5 km **naŭ mil kvarcent tri komo kvin kilometroj / naŭ mil kvarcent tri kaj duona kilometroj**

8,6 kg **ok komo ses kilogramoj / ok kilogramoj (kaj) sescent gramoj**

+37,7° **(plus) tridek sep komo sep gradoj / tridek sep komo sep gradoj super nulo**

49,75 USD **kvardek naŭ komo sep kvin (Usonaj) dolaroj / kvardek naŭ (Usonaj) dolaroj (kaj) sepdek kvin cendoj**

80 Words for sub-units like **grams** and **cents** can sometimes be understood through context in expressions like these: **tri kilogramoj (kaj) sepcent, kvar dolaroj (kaj) sepdek kvin.** The speaker should be careful to ensure that there is no doubt as to the sub-unit being referenced.

Hours and time

81 To show the hour, one of the following models should be used. The words **horo** (hour) and **minutoj** (minutes) are very frequently left out and understood only through context.

82 **In numbers** **Saying the numbers**

3:15 (aŭ 15:15) **Estas la tria (horo) (kaj) dek kvin (minutoj). / Estas dek kvin (minutoj) post la tria (horo).**

9:45 (aŭ 21:45) **Estas la naŭa (horo) (kaj) kvardek kvin (minutoj). / Estas dek kvin (minutoj) antaŭ la deka (horo).**

83 To add more clarity, the expressions **en la antaŭtagmezo** or **antaŭtagmeze** (in the morning), and **en la posttagmezo** or **posttagmeze** (in the afternoon) may be added. But the 24-hour system may also be used:

84 **Estas la dek-kvina (kaj) dek kvin. / Estas dek kvin post la dek-kvina.** - It is now fifteen-fifteen. It is fifteen minutes after fifteen hundred hours. (a quarter past three PM)

Estas la dudek-unua (kaj) kvardek kvin. / Estas dek kvin antaŭ la dudek-dua. - It is 21:45 / It is 9:45 p.m.

duono (a half), **duonhoro** (a half hour), or **duona horo** (a half hour) are often used.

86 One speaks of the hour using ordinal numbers: **tria** (third), **naŭa** (ninth), **dek-dua** (twelfth), etc. To ask about the time, one therefore uses **the question word kiom** (how much) + A-finaĵo → (+ final letter A) **kioma** (how many-eth).

87 **kiom?** - How much? How many? → **tri**, **naŭ**, **dek du**, **dudek unu**...

kioma? - How many-eth? → **tria**, **naŭa**, **dek-dua**, **dudek-unua**...

88 **Kioma horo estas, gardisto?** - What time is it, guard?

Kioma horo estis, kiam vi alvenis? - What time was it when you arrived?

89 To show when something happens, a role marker must be used, normally **je**, **antaŭ**, **post**, **ĝis** or **ĉirkaŭ**:

90 **Je (la) kioma horo okazis tio?** - At the how-manyeth hour did that happen? At what time did that happen?

Tio okazis je la tria kaj kvardek. - That happened that the third and forty. That happened at three forty (3:40).

Ni devas manĝi antaŭ la oka. - We must eat before eight.

Post la dek-unua horo ĉio devas esti preta. - After the eleventh hour, everything has to be ready. After eleven, everything has to be ready.

91 When referring to hours, the role marker N should ordinarily not be used, because there is a risk of confusing the hour with the date, since it is also shown with ordinal numerals: **je la tria** = "je la tria horo", **la trian** = "en la tria tago de la monato".

Dates

92 The following models should be used to show a date. The words **tago** (day) and **en la jaro** (in the year) are very often omitted and understood only through context.

93 **Estis la tria (tago) de Decembro (en la jaro) mil naŭcent naŭdek unu.** - It was the third (day) of December (of the year) nineteen ninety-one.

Hodiaŭ estas la dua (tago) de Majo (en la jaro) du mil kvin. - Today is the sencond (day) of May (of the year) two thousand and five.

Morgaŭ estos la dudek kvina (tago) de Julio (en la jaro) du mil dek. - Tomorrow it will be the twenty-fifth (day) of July (of the year) two thousand and ten.

94 Ordinal numerals can also be used for years, but this usage is becoming more and more uncommon: **Estis la lasta de Januaro (en la jaro) mil-okcent-okdek-sepa.**

95 Between the day and the month, **de** (of) should always be used, because the ordinal number doesn't relate to the month, but to the word **tago** (day), which is normally left out: **la unua de Majo = la unua tago de Majo, la dek-tria de Decembro = la dek-tria tago de Decembro.** If the expression **la unua Majo** (the first of May) were used, it would be referring to the first of several months of May.

96 To show the date when something happened, is happening, or will happen, a suitable role marker should be used. The **N ending** is often used for this purpose:

97

Ili venos la sepan (tagon) de Marto. = Ili venos en la sepa (tago) de Marto. - They will come the seventh of March.= They will come on the seventh day of March.

La unuan de Majo ili komencis sian vojaĝon. = En la unua (tago) de Majo... - On the first of May they started their trip. =On the first (day)of May...

Mi laboris tie ĝis la unua de Aŭgusto mil naŭcent sesdek. - I worked there until the first of August nineteen sixty.

Antaŭ la lasta tago de Junio vi devas trovi laboron. - Before the last day of June you have to find work.

Post la dek kvina de Marto ŝi loĝos ĉe mi. - After the fifteenth of March she will live with me.