



Kawm Aids Numbers

Welcome to the Wonderful World of Learn & Teach

Txoj kev kawm yog 'Kawm thiab Qhia'! Kawm tag lub neej!

st
ib Kawm, thaum nkag siab, pib qhia. Hauv kev kawm dawb ceev ceev
cov kawm qhia cov kawm qeeb. Hauv kev ua haujlwm tus neeg ua haujlwm paub txog kev cob
qhia cov neeg tuaj tshiab. Nyob hauv tsev, niam tais yawm txiv qhia cov me nyuam, cov me nyuam loj.
Cov niam txiv qhia me nyuam.

Kawm cov lus qhia Thaum

kawm lossis qhia tsis yog tshawb fawb phau ntawv qhia no nkaus xwb tab sis ntau yam ntawm
lwm tus. Thaum nrhiav tau ib daim ntawv zoo **Plagiarize** qhov chaw koj xav tau thiab nthuav dav
ntawm cov no (tseem siv rau **Cov Kws Qhia Ntawv thiab Cov Kws Qhia**).



Khiaiv: spell check and grammar check.

Ntxiv: xim, duab thiab suab xav tau.

Nyeem ntawv pov thawj, yog tias xav tau hloov pauv.

Ua koj txoj haujlwm 'Copyright free' ces luam tawm.

Directory Numbers Ntxiv cov lus ~ Cov

zauv ~ Cov zauv lub ntsiab lus ~ Khawv koob num-bers ~ Cov lej siv ~ Tus
lej tus nqi ~ lej cim ~ ntsuas ~



1Vajtswv tos ntsoov koj!

Kev Thov **Vajtswv** Ua Kev Zoo Siab Hnub Kawm Ntawv 6.1.7. NAtm Nyob zoo **1 Vaj Tswv**,

tus tsim lub ntiaj teb zoo nkauj tshaj plaws Koj tus neeg saib xyuas
uas txo hwj chim tshaj plaws (**1** Kev cog lus nrhiav, nce, siv Kev st npe)
Paub tas mus li Mus Kawm thiab Qhia ntawm Kev Kawm Dawb Los
txhawb kev kawm pub dawb pub dawb rau kev kawm

dhau lub neej mus rau lwm tiam Rau Lub

Hwj Chim ntawm **1 VAJTSWV** thiab Kev Zoo ntawm Tib

Neeg Hnub Thov Vajtswv no siv hauv chav kawm thiab ntawm Kev

Kawm Ntawv



Ntxiv rooj

Lub rooj ntxiv muaj 400 ntxiv. Mus los ntawm sab laug mus rau sab xis hauv ib kab, lossis los ntawm sab saum toj mus rau hauv qab hauv txhua kab, txhua tus lej tshiab yog 1 ntxiv (+) dua li tus lej dhau los (tus neeg txuas ntxiv). Cov neeg ua tiav yog cov sequence ntawm cov lej xws li 0, 1, 2, 3, 4, 5, ... Cov thawv duab ntsoov ntsoo yog ob npaug ntawm tus lej xws li $2 + 2 = 4$

+	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28
9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

O (zero) tsis suav nrog; ntxiv O (zero) rau txhua tus lej ua rau tib tus lej. Xaiv tus lej (tus lej) ntawm kab rov tav sab saum toj; ntxiv (+) nrog tus lej ntawm kab laug sab laug. Txav mus rau ntawm txoj kab ntsug no kom txog thaum txoj kab kab rov tav mus txog. Piv txwv li $3 + 5 = 8$ **Nco tseg:** $3 + 5$ muaj qhov tshwm sim zoo ib yam li $5 + 3 = 8$ Ntxiv tuaj yeem hloov pauv rov ua dua yog qhov qub.

Tus lej

Cov naj npawb tseem ceeb thiab 7 yog Vajtswv!

Thaum tib neeg pib siv cov lej nws tau npaj txhij los hloov mus rau nws txoj hmoo:
Tus Saib Xyuas ntawm Lub Ntiaj Teb Lub Cev. Tus lej ua
nws muaj peev xwm piav qhia thiab ntsuas kom muaj nuj nqis, nrawm, ..., tsim cov tswv
yim lej. Cov Neeg Saib Xyuas Neeg Saib Xyuas ntseeg tias cov lej yog lub hauv paus
tseem ceeb ntawm tib neeg txoj kev txawj ntse.

Cov lej yog lub hauv paus ntsiab lus lej uas tib neeg
siv los tsim ntau lub tswv yim lej. Cov naj npawb coj mus rau kev tshawb fawb uas ua rau
peb nce qib thiab nkag siab ntau dua ntawm **1 Vajtswv txoj** kev tsim. Cov naj npawb
tsim kev vam meej thiab rhuav tshem lawv. Lub voj voog ntawm
"Pib pib, xaus thiab rov ua dua".

Cov naj npawb tso cai suav:

Ntiv tes ntawm ib txhais tes 1, 2, 3, 4, 5. Qhov tshwm sim (symbol: =) 5 ntiv tes.

Ntxiv (cim: +) tso cai rau kev sib koom ua ke ntau dua 1 suav cov txiaj ntsig.

Ntiv tes ntawm 2 txhais tes $5 + 5 = 10$ ntiv tes ntawm ob txhais tes.

Tshem tawm (cim: -) tso cai rau txo qhov tshwm sim dhau los. 1 s ua
5 ntiv tes muaj 1 ntiv tes txiaj tawm (kev sib tsoo): $5 - 1 = 4$ ntiv tes sab laug ntawm tes.

Multiplying (cim: •) tso cai (yooj yim) suav cov nqi sib xws
cov khoom. Ntiv tes ntawm 3 txhais tes $3 \cdot 5$ (yooj yim dua $5 + 5 + 5$) = 15 ntiv tes ntawm 3
tes. Thaum muab tus lej qub ntau zaus siv lub **hwj chim** nota-tion: $2 \cdot 2 \cdot 2 \cdot 2$ (2⁵
lub zog ntawm 5) = 32 lub zog thib tsib ntawm 2.

Cov naj npawb tso cai rau kev tsim cov **kab ke** ntawm cov lej, 0, 1, 1, 1, 2, 3, 5,
8, 13, 21, 34, 55, 89, 144, 233, ... (cim: ...) tom qab 2 thawj tus lej,
txhua tus lej yog cov lej ntawm 2 tus lej ua ntej.

Tus Saib Xyuas Tus Saib Xyuas siv lub hauv paus 10 natural tooj system. Cov cim 1 dig-
nws siv: 0 (zero), 1 (ib), 2 (ob), 3 (peb), 4 (plaub), 5 (tsib), 6
(6), 7 (xya), 8 (8), 9 (xiav). Cov naj npawb: 0, 2, 4, 6, 8 hu ua
txawm; 1, 3, 5, 7, 9 yog hu ua khib. Tom qab 9, 2 tus lej (hu ua 10's) raug siv:
10, 11, 12, 13, 14, 15, 16, 17, 18, 19.

Tus 0 muab tso rau sab xis ntawm ib qho ntawm 9 tus lej tsim ib tus lej 2 tus lej hu ua 10's
(ten's), piv txwv li 70. Ob 00 hu ua 100's (pua pua),
Piv txwv li 700. Peb 000 hu ua 1000's (txheej), piv txwv li 7000. Txhua 3
Cov lej suav los ntawm txoj cai raug cais los ntawm tus lej cim piv txwv
1,000,000 (1 lab).

Per cent(symbol: %) txhais tau tias pua pua. Ib feem ntawm 100 kuj tseem tuaj yeem qhia tau tias yog ib feem pua **piv txwv li** $7/100 = 7\%$ **lossis decimal** 0.07 (.).Ib dot yog siv los qhia

qhov tseem ceeb tsawg dua 1 **piv txwv li** 0.1 (hu ua **Decimal**).

0.1 (**Decimal**) kuj tuaj yeem qhia tau tias yog ib feem siv cov cim faib $1/10$ $0.1 = 1/10$ **lossis ib xees** 10% Cov lej siv rau hauv cov qauv duab kos duab: 3 sided

Daim duab peb sab, 4 sided Rec-tangular, **Square**, 5 sided Pentagon, 6 sided Hexagon, 7 sided Al bolts . Octagon. **Square²** (2 seem), **Cube³** (3 seem), Lub khob hliav qab, Lub tog raj kheej ...



7 yog los saum ntuj los vim nws siv **1 HUAB TAIS 7** hnuh* los tsim lub cev lub cev thiab tib neeg. 6 hnuh ua haujlwm + 1 hnuh so = 1 lub lis piam.

*** Nco tseg! 1 HUAB TAIS** lub lim tiam txawv ntawm CG Kalender lub lim tiam.

Hnuh 1 Hnuh 2 nruab hnuh Hnuh 4 Hnuh 5 lis xaus lom zem-hnuh

1 HUAB TAIS xav tau 7 xeev. Ua rau 7 Lub Xeev ~ **1 FAITH** raws li 7

Scrolls ~ cim: **Heptagon** (7 sab, 7 lub kaum ntse ntse)

1 Lub Koom Txoos: Cov Neeg Saib Xyuas Lub Ntiaj Teb muaj 7 lub xeev ywj siab tswj hwm

(**Orackle**) ~ 7 Kev phem yog tib neeg Kev Ua Phem,

'Chain of Evil' muaj 7 qhov txuas ~ 7_7 Txoj Cai: pawg neeg sawv cev sib npaug 7 HE

thiab 7 SHE ~ **Cov lej ntsiab lus 0** Tawm ntawm tsis muaj dab tsi **1 Vajtswv** tsim lub ntiaj teb lub

cev. Zero yog tus naj npawb ntawm kev

tsim. **Tsis zoo:** Zero yog tus naj npawb ntawm kev puas tsuaj.

1 Qhov pib, ua ntej, 1 thiab nkaus xwb. **1 Vajtswv 1 Kev Ntseeg 1 Lub Koom Txoos.**

Tsis zoo: Qhov kawg, ua kawg, muaj kev phom sij. Qhov ntau.

2 Kev sib haum xeeb, dawb huv matrimony, mating, ntxaib.

Tsis zoo: Anarchy, sib cais, duab liab qab, celibacy.

3 lub sij hawm daim duab peb sab, 3 ncej ntawm kev ntseeg (**1 VAJTSWV 1 FAITH 1 Lub Koom Txoos**).

Tsis zoo: 3 yog neeg coob coob, cults, av qeeg. **4** 4 lub caij

(caij nplooj ntoos hlav, caij ntuj sov, caij nplooj zeeg, caij ntuj no) ntawm lub xyoo, quattro

xyoo, 4 txoj kev (sab qaum teb, sab hnuh tuaj, sab hnuh poob, sab qab teb), 4 yam (hluav taws, dej, ntiaj teb, huab cua), square, lub voos xwmfab, cov kev cai. **Tsis zoo:** kev ntshov siab, tsis meej pem tsis muaj kev cai, tsis muaj kev sib koom ua ke, Murphy txoj cai.

5 Lub zeem muag, tho kev, ua siab ntev, ua.

Tsis zoo: tiv thaiv, roving, apathy.

6 Pawg, zej zog, kev ncaj ncees, zej zog saib, pawg ntseeg.

Tsis zoo: Hermit, cais, elitist, wealth apartheid, gangs.

7 1 Tswv Ntuj cov lus tseeb tshaj tawm Txoj Cai Lij Choj Qhia, Kev xav, IP (txoj kev txawj ntse), los yav tom ntej. Tsis zoo: Fantasizing, xav xav, fake lus, copyright, patent.

8 Kev ncaj ncees, txoj kev ua haujlwm, lub luag haujlwm, kev ntseeg siab. Tsis zoo: Kev tsis ncaj ncees, poob hauj lwm, immaturity, corrupt, dag.

9 Kev sib raug zoo, zoo siab, ua phooj ywg, hais lus rau pej xeem. Negative: Tus neeg laus, grumpy, tsis hais lus.

1 HUAB TAIS tos txais koj!

Xov Tooj Thov Vajtswv

Scroll 1 affirmation 6 LGM

Nyob Zoo 1 Tus Tswv, tus tsim lub ntiaj teb zoo nkauj tshaj plaws Koj tus neeg saib xyuas uas muaj siab ntseeg siabst npe) tshaj plaws (1 Ua tsaug 'Koj

rau cov lej Lej pab peb nkag siab Tus lej Xaus Saus

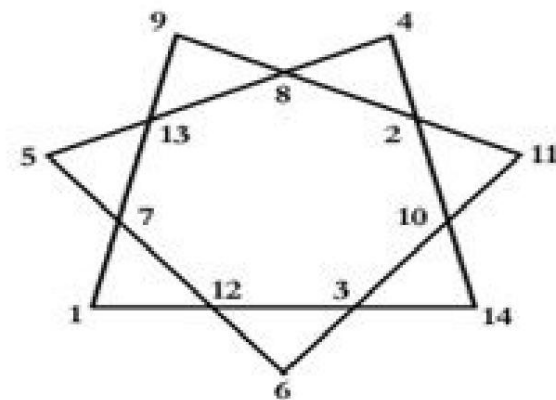
los pab hauv tus neeg saib xyuas lub luag haujlwm Tus lej rau kev xav thiab kev lom zem Rau Lub Hwj

Chim ntawm 1 Vajtswv thiab Tib Neeg Lub Neej Txoj kev thov

Vajtswv no yog siv thaum xav tau!



Khawv koob tooj



Cov lej **Magic Heptagram** tau muab tso rau ntawm txhua qhov kev sib tshuam thiab kev sib tshuam kom 4 tus lej ntawm txhua kab 30!



Tsim 7 taw tes khawv koob heptagon hnuv qub?

Kev lom zem nyob rau hauv **khawv koob squares** yog qhov tseeb hais tias qhov twg los xij nyob rau hauv ib square yog ntiv rau: vertically (v), horizontally (h) los yog diagonally (d) qhov tshwm sim yog tib yam.

Magic squares

Khawv koob squares nrog 9, 16, 25 tus lej

Magic Squares				v34	v34	v34	v34	d34
v15	v15	v15	d15	16	3	2	13	h34
8	1	6	h15	5	10	11	8	h34
3	5	7	h15	9	6	7	12	h34
4	9	2	h15	4	15	14	1	h34
d15				4 corners = 34				d34
v65	v65	v65	v65	v65	d65			
11	24	7	20	3	h65			
4	12	25	8	16	h65			
17	5	13	21	9	h65			
10	18	1	14	22	h65			
23	6	19	2	15	h65			
4 corners + middle = 65					d65			

Tsim 49 tus lej magic square?

Challenge

Kev siv tus lej

A: Cov lej **suav** suav nrog 1, 3, 5, 7, 9, thiab txhua tus lej uas nws zaum kawg-nws yog ib qho ntawm cov no.

B: **Txawm** tus lej suav nrog 0, 2, 4, 6, 8, thiab txhua tus lej uas nws xeeem tus lej yog ib qho ntawm cov no.

C: **Tag nrho** cov lej suav nrog cov lej lej thiab lej.

D: Tus lej **Binary** yog lub hauv paus 2 tus lej siv 2 lub cim, 0, 1.

E: **Feem pua (%)** nrhiav 15% ntawm 50 muab tus % thiab tus lej di-vide los ntawm 100 = $7.5 : 15 \cdot 50 : 100 = 7.5$

Qhia qhov muab % ua ib feem, muab $15 \cdot 100 / 100 = 15$

Qhia ib tug muab % ua tus lej, muab $0.15 \cdot 100 = 15$

F: **Fraction** 3 cov kauj ruam yog xav tau los hloov 15 % mus rau qhov feem ntau frac-tion $3 / 20 : 1$. omit % kos npe. **2.** faib los ntawm 100 $_ 15 / 100$. **3.** txo

mus rau cov nqe lus qis tshaj_ 3 / 20 .

G: Decimal hloov 15% rau decimal. Tshem tawm % kos npe. Tom qab ntawd txav tus lej lej ntawm % ob qhov chaw mus rau

sab laug = 0.15 **H:** Cov lej **xwm txheej** tso cai rau kev tsim cov lej ua ntu zus xws li 0, 1, 1, 2, 3 ... tom qab 2 thawj tus lej, txhua tus lej yog cov lej ntawm 2 tus lej ua ntej.

Kuv: Cov lej **tseem ceeb** , nrhiav lawv (tag nrho cov lej sib faib los ntawm lawv tus kheej) Piv txwv li nrhiav tag nrho cov lej tseem ceeb rau 20. Sau tag nrho cov lej ntawm 2 txog 20. Qhov tseem ceeb 2 tsis quav ntsej tag nrho cov zauv ntawm 2. Qhia tus lej tom ntej (3) uas tsis tseem ceeb tsis saib xyuas tag nrho nws cov zauv. Rov ua dua kom txog thaum kawg ntawm daim ntawv teev npe. Cov primes yog cov lej tseem ceeb. 2, 3, 5, 7, 11, 13, 17, 19, thiab

J: Cov lej **Roman** yog nyob ntawm qee cov tsiaj ntawv ntawm cov tsiaj ntawv uas tau muab sib xyaw ua ke los qhia cov lej lossis qhov sib txawv ntawm lawv cov txiaj ntsig.

^{1 kuv} , 2 II, 3 III, 4 IV, 5 V, 6 VI, 7 VII, 8 VIII, 9 IX, 10 X, 11 XI, 12 XII,

20 XX, 30 XXX, 45 XLV, 50 L, 76 LXXVI, 100 C, 500 D, 1000 M.

Tus lej muaj nqis

0 > Zero

1> Ib

5 > Tsib

7 > Xya

10 > Kaum

50> Tsib caug

100> Pua

500> tsib puas

1,000> txhiab

5,000> Tsib txhiab

10,000> Kaum ib txhiab

50,000> Tsib caug txhiab

100,000>Hnub txhiab

500,000> Tsib puas txhiab

1,000,000 > lab

10,000,000,> Kaum lab

100,000,000> Pua lab

1,000,000,000 > Milliard

10,000,000,000> Kaum lab lab

100,000,000,000> Pua lab

1,000,000,000,000 > Billion

10,000,000,000,000 > Kaum billion

100,000,000,000,000 > Pua pua billion

1,000,000,000,000,000 > trillion

10,000,000,000,000,000 > Kaum trillion

100,000,000,000,000,000 > Pua trillion

1,000,000,000,000,000,000 > Zillion

10,000,000,000,000,000,000 > Kaum zillion

100,000,000,000,000,000,000 > Pua zillion

Nco tseg ! Los ntawm sab xis mus rau sab laug ib qho comma muab tso rau tom qab txhua 3rd tus lej.

Mathematical symbols

= result equal to

ÿ tsis sib npaug

ÿ identically sib npaug rau

+ ntiv kev sib koom ua ke ntau dua 1 suav cov txiaj ntsig

- take-away txo qhov tshwm sim dhau los

± ntiv lossis rho tawm

ÿ rho tawm lossis ntiv

• los yog x muab ntau (yooj yim dua) suav cov nqi sib xws

cov khoom

÷ kev faib ua feem ntawm qhov tshwm sim dhau los

> ntau dua ÿ sib

< tsawg dua

npaug lossis ntau dua tsis

ÿ sib npaug los yog tsawg dua

✂ tshaj % feem pua

✂ tsis tsawg dua

~

‰ tso cai

yog proportional rau

ÿ yog kwv yees li sib npaug

Omega , sum ntawm tag nrho cov tseem ceeb tshaj plaws multiplicities

ÿ sib raug mus rau

ÿ Delta, sib txawv

ÿ Pi, cov khoom

ÿ Sigma, sum ntawm

ntawm ÿ square

{ } braces, empty set

root [] square

, } set of (xws li)

brackets () parentheses

{ {...} & lwm yam, infinite teeb

ÿ yog li ntawd

ÿ vim, txij li thaum



ÿ subset

ÿ super set

ÿ element of

ÿ tsis yog lub ntsiab ntawm

∅ Npliag teeb ÿ

U universal teeb

integral ÿÿ

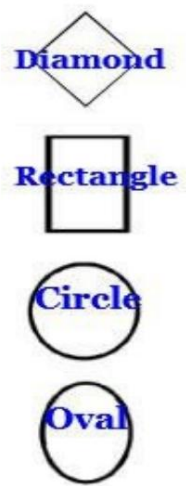
ÿ kaw contour integral

ob chav integral

ÿ kaw ntom nti integral

ÿÿÿ triple integral

ÿ kaw ntim integral



Kev ntsuas

Tus Saib Xyuas Tus Saib Xyuas siv New Age standard (NAs) los ntsuas. Ib tug tshiab metric version. UCG kev pabcuam zej zog.

Length Base unit: meter (m) ~

Cheeb tsam Base unit: square-meter (m²) ~ 3 D meter (m³) ~

Volume Base unit: litre (l) ~

Lub cev hnyav : grams (g)

Ntsuas prefixes. Siv Capitalized prefixes rau lub zog zoo.

Prefix Symbol Power [] Tus nqi

Yotta Y 10 [24] 1,000,000,000,000,000,000,000,000

Zetta Z 10 [21] 1,000,000,000,000,000,000,000

Exa E Peta P 10 [18] 1,000,000,000,000,000,000

10 [15] 1,000,000,000,000,000

T10 [12] 1,000,000,000,000

Giga G 10 [9] 1,000,000,000

Mega M 10 [6] 1,000,000

Myria Kuv 10 [4] 10,000

Kilo K 10 [3] 1,000

Hecto H 100 [2] 10

Deca D 10 [0] 10 [1] 10

base b deci 10 [-1] centi 1

10 [-2] 0.01 d 0.1

c

milli m 10 [-3] 0.001

micro ÿ 10 [-6] 0.000,001

nano n	10 [-9] 0.000,000,001
pico p femto f	10 [-12] 0.000,000,000,001
atto zepto z	10 [-15] 0.000,000,000,000,001
yocto ib	10 [-18] 0.000,000,000,000,000,001
y Length Base	10 [-21] 0.000,000,000,000,000,000,001
unit: meter (m)	10 [-24] 0.000,000,000,000,000,000,000,001

~ me me prefixes yog (ÿ) qhov tseem ceeb ntawm

puag. [0] Brackets qhia tus nqi zog. nrug ntawm 2 ntsiab lus. Piv txwv li
0..10 = 10

Prefix Symbol Power [] Tus nqi

1 Yotta Ym 10 [24] 1,000,000,000,000,000,000,000,000

1 Zetta Zm 10 [21] 1,000,000,000,000,000,000,000,000

1 Exa Em 10 [18] 1,000,000,000,000,000,000,000

1 Peta Pm 10 [15] 1,000,000,000,000,000,000

1 Tera Tm 10 [12] 1,000,000,000,000,000

1 Giga Gm 10 [9] 1,000,000,000,000

1 Mega Mm 10 [6] 1,000,000

1 Myria Mym 10 [4] 10,000

1 Kilo Km 10 [3] 1,000

1 Hecto Hm 10 [2] 100

1 deca Dm 10 [1] 1 meter m 10 10

[0] 1 deci dm 10 [-1] 1 centi cm 1

10 [-2] 0.01 0.1

1 hli 10 [-3] 0.001

1 micro ÿm 10 [-6] 0.000,001

1 nano nm 10 [-9] 0.000,000,001

1 teev tsaus ntuj 10 [-12] 0.000,000,000,001

1 femto fm 10 [-15] 0.000,000,000,000,001

1 teev sawv ntxov 10 teev sawv ntxov [-18] 0.000,000,000,000,000,001

1 zepto zm 10 [-21] 0.000,000,000,000,000,000,001

1 yocto ym [-24] 0.000,000,000,000,000,000,000,001

Square meter chav tsev: ' meter ' (m²) ~ me me prefixes yog (ÿ) qhov tseem ceeb ntawm

puag. [0] Brackets qhia tus nqi zog. Dav, dav ntawm ib cheeb tsam multiplied

. Ej 10 • 10 = 100 m²

Prefix Symbol Power [] Tus nqi

1 Yotta Ym² 10 [24] 1,000,000,000,000,000,000,000,000

1 Zetta Zm^2 10 [21] 1,000,000,000,000,000,000,000

1 Exa Em^2 10 [18] 1,000,000,000,000,000,000

1 Peta Pm^2 10 [15] 1,000,000,000,000,000

1 Tera Tm^2 10 [12] 1,000,000,000,000

1 Giga Gm^2 10 [9] 1,000,000,000

1 Mega Mm^2 10 [6] 1,000,000

1 Myria Mym^2 10 [4] 10,000

1 Kilo Km^2 10 [3] 1,000

1 Hecto Hm^2 10 [2] 100

1 deca Dm^2 10 [1] 1 m^2 10 [0] 1 10

deci dm^2 10 [-1] 1 centi cm^2 10 1

[-2] 0.01 0.1

1 milli mm^2 10 [-3] 0.001

1 micro μm^2 10 [-6] 0.000,001

1 nano nm^2 10 [-9] 0.000,000,001

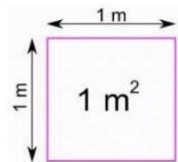
1 pico pm^2 10 [-12] 0.000,000,000,001

1 femto fm^2 10 [-15] 0.000,000,000,000,001

1 am^2 10 [-18] 0.000,000,000,000,000,001

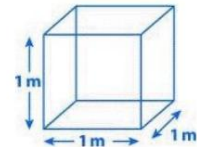
1 zepto zm^2 1 10 [-21] 0.000,000,000,000,000,000,001

1 yocto ym^2 10 [-24] 0.000,000,000,000,000,000,000,001



Square
meter
(m^2)

Kub
meter
(m^3)



Cubic meter unit: meter (m^3) ~ tsab ntawv ua ntej yog (y) qhov tseem ceeb ntawm puag. [0] Brackets qhia tus nqi zog. Dav, dav, qhov tob ntawm ib cheeb tsam multiplied. Piv txwv li $10 \cdot 10 \cdot 10 = 1000 m^3$

Prefix Symbol Power [] Tus nqi

1 Yotta Ym^3 10 [24] 1,000,000,000,000,000,000,000,000

1 Zetta Zm^3 10 [21] 1,000,000,000,000,000,000,000

1 Exa Em^3 10 [18] 1,000,000,000,000,000,000

1 Peta Pm^3 10 [15] 1,000,000,000,000,000

1 Tera Tm^3 10 [12] 1,000,000,000,000

1 Giga Gm^3 10 [9] 1,000,000,000

1 Mega Mm^3 10 [6] 1,000,000

1 Myria Mym^3 10 [4] 10,000

1 Kilo Km^3 10 [3] 1,000

1 Hecto Hm^3 10 [2]	100
1 deca Dm^3 10 [1] 1 meter m^3	10
10 [0] 1 deci dm^3 10 [-1] 1 centi	1
cm^3 10 [-2] 0.01	0.1

1 milli mm^3 10 [-3] 0.001	
1 micro μm^3 10 [-6] 0.000,001	
1 nano nm^3 10 [-9] 0.000,000,001	
1 pico pm^3 10 [-12] 0.000,000,000,001	
1 femto fm^3 10 [-15] 0.000,000,000,000,001	
1 atto am^3 10 [-18] 0.000,000,000,000,000,001	
1 zepto zm^3 10 [-21] 0.000,000,000,000,000,000,001	
1 yocto ym^3 10 [-24] 0.000,000,000,000,000,000,000,001	

Volume Base unit: litre (l) ~ me me prefixes yog (y) qhov tseem ceeb ntawm lub hauv paus.

[0] Brackets qhia tus nqi zog. Volume ntawm 2 ntsuas. Ej 0.. 10
= 10

Prefix Symbol Power [] Tus nqi

1 Yotta Yl 10 [24]	1,000,000,000,000,000,000,000,000
1 ZPO 10 [21]	1,000,000,000,000,000,000,000,000
1 Exa El 10 [18]	1,000,000,000,000,000,000,000,000
1 Peta Pl 10 [15]	1,000,000,000,000,000,000,000,000
1 TSI 10 [12]	1,000,000,000,000,000,000,000,000
1 Giga Gl 10 [9]	1,000,000,000,000,000,000,000,000
1 Mega Ml 10 [6]	1,000,000,000,000,000,000,000,000
1 Myria Myl 10 [4]	10,000,000,000,000,000,000,000,000
1 Kilo Kl 10 [3]	1,000,000,000,000,000,000,000,000
1 Hecto Hl 10 [2]	100,000,000,000,000,000,000,000
1 Deca Dl 10 [1] 1 liter 10 [0]	10,000,000,000,000,000,000,000,000
10 [-1] 10 [-2] 0.01	1,000,000,000,000,000,000,000,000
1 deci dl 1	0.1,000,000,000,000,000,000,000,000
centi cl 1 milli	0.01,000,000,000,000,000,000,000,000
ml 1 micro μl 1	10 [-3] 0.001 ib
nano nl 1 pico	10 [-6] 0.000,001
pl 1 femto fl 1	10 [-9] 0.000,000,001
atto al 1 zepto	10 [-12] 0.000,000,000,001
zl	10 [-15] 0.000,000,000,000,001
	10 [-18] 0.000,000,000,000,000,001
	10 [-21] 0.000,000,000,000,000,000,001

1 yoj yl



10 [-24] 0.000,000,000,000,000,000,001

Ntim

(l)

Qhov hnyav

(g)



Luj Base unit: **gram (g)** ~ me me prefixes yog (y) qhov tseem ceeb ntawm

puag. [0] Brackets qhia tus nqi zog. Qhov hnyav nruab nrab ntawm 2 ntsuas. Piv txwv li
 0..10 = 10

Prefix Symbol Power [] Tus nqi

1 Yoj Yg 10 [24] 1,000,000,000,000,000,000,000,000

1 Zib Zg 10 [21] 1,000,000,000,000,000,000,000

1 Exa np 10 [18] 1,000,000,000,000,000,000

1 Peb Pg 10 [15] 1,000,000,000,000,000

1 Tau Tg 10 [12] 1,000,000,000,000

1 Ib Gg 10 [9] 1,000,000,000

1 Mega Mg 10 [6] 1,000,000

1 Myria Mg 10 [4] 10,000

1 Kilo Kg 10 [3] 1,000

1 Hecto Hg 10 [2] 100

1 Deca Dg 10 [1] 10

1 gram g 1 10 [0] 1

deci dg 10 [-1] 1 centi cg 10 0.1

[-2] 0.01

1 mg 10 [-3] 0.001

1 micro yg 10 [-6] 0.000,001

1 nano ng 1 10 [-9] 0.000,000,001

pico pg 10 [-12] 0.000,000,000,001

1 femto fg 10 [-15] 0.000,000,000,000,001

1 atto ag 10 [-18] 0.000,000,000,000,000,001

1 zepto zg 10 [-21] 0.000,000,000,000,000,000,001

1 yocto yg [-24] 0.000,000,000,000,000,000,000,001

PS-1 (Packaging-standard) npog cov neeg siv khoom xav tau: ncav ncees yooj yim rau piv cov khoom kom muaj nuj nqis ', ntim. Ntim yog recyclable.

Tsoom fwv yuav tsum tau standardize ntim cov ntsiab lus loj: khoom (gram, Kg), kua (litre). Standard yuav tsum tau siv rau kev lag luam, industrial thiab tus kheej ntim. Ntim yuav tsum yog recyclable.

Universe Custodian Guardians Ntim Standard Table.

Khoom hnyav (g, Kg) thiab kua hnyav (l) tsuas tuaj yeem ntim tau, faib-

uted, muag nyob rau hauv 14 qhov ntau pom nyob rau hauv lub rooj.

10 mg > 20 mg > 50 mg > 100 mg

200 mg > 500 mg > 1 g > 10 g > 50 g

100g> 200g> 500g>

1 Kg > 2 Kg > 5 Kg > 10 Kg > 50 Kg

100Kg> 500Kg> 1000Kg> 2000Kg



10 ml > 20 ml > 50 ml > 100 ml

200ml > 500ml >

L > 10 l > 50 l > 100 l > 200 l

500L> 1000L> 2000L



Kev Taw Qhia Cov Neeg Siv Khoom: Khoom hnyav, Cov kua dej hnyav yuav tsum tau qhia tus nqi rau 1 kg, 1 l piv cov nqi + qhov hnyav thiab tus nqi. Ntim yuav tsum yog recyclable.

Ib yam khoom uas qis tshaj kg, l tus nqi yog 'Bargain'.

Cov nyiaj khwv tau los ntawm kev lag luam tso cai ua txhaum cai txhaum cai **'Deceitful Pack-aging (kev dag ntxias)'**. Cov neeg siv khoom xav tau kev tiv thaiv los ntawm kev dag ntxias, siab hlob, profiteering, tsis ncaj ncees lawm producers, manufacturers thiab retailers uas siv **'Deceitful packaging' (down sizing content)** koj kom zoo dua (rip off) ntawm cov neeg siv khoom. **MS R3 Txhawb PS-1** Ntim tus qauv thiab tuav ac-countable deceitful packagers.

Piv txwv li: Ib lub chaw tsim khoom lag luam tuaj hauv 0.440 kg pob peb-hauv lawv cov ntawv cim npe. Tib yam khoom kuj tau sau npe raws li cov khw muag khoom Cov khoom lag luam hauv tsev, tab sis cov ntsiab lus ntawm pob yog txo rau 0.415 kg. Qhov no yog ua li ntawd tus neeg muag khoom tuaj yeem muag lawv lub tsev hom ntawm tus nqi qis dua manufacturers hom. Qhov no yog ib tug dag, tsis ncaj ncees thiab greedy dag rau dag cov neeg siv khoom xav tias lub tsev lag luam yog qhov kev sib tham-ua rau nws tus nqi qis. Thaum qhov tseeb, vim cov neeg siv khoom tau txais tsawg dua cov khoom tsis muaj kev txuag thiab qee zaum cov neeg siv khoom hauv qhov tseeb kawg nce them ntau dua.

Qhov 2nd chaw tsim tshuaj paus muag ntawm tus nqi qis, nws cov khoom zoo li bar-tau txais. Vim tias muaj cov khoom tsawg dua hauv 2nd package nws yuav tsum muaj-fore sell for tsawg, tsis ua nws ib bargain lawm. Qhov 2nd manufacturer cia siab nyob rau hauv kev dag, tsis ncaj ncees thiab greedy yam, tias tus neeg siv khoom yuav tsis kuaj qhov hnyav vim nws lub ntim zoo ib yam li cov khoom sib tw.

Ntim tuaj feem ntau nrog tsawg dua cov ntsiab lus tag nrho (oversized packag-ing). Qhov kev dag ntxias no yog los dag ntxias cov neeg siv khoom ntseeg lawv tau txais

ntau ces lawv yeej tau!

Tsoom fwv yuav tsum tau ua qauv ntim cov ntsiab lus loj: khoom (gram, Kg) thiab kua (liter). Standard yuav tsum siv rau kev lag luam, kev lag luam thiab kev ntim khoom ntawm tus kheej. Ntim yuav tsum yog recyclable.

Morse code

Ib txoj kev siv hauv kev sib txuas lus. Lub sij hawm teeb liab: dot, dash !

Qhov ntev ntawm lub dot yog 1 units! Dash yog 3 units! Qhov chaw nruab nrab ntawm ib feem ntawm tib tsab ntawv yog 1 units. Qhov chaw nruab nrab ntawm cov tsiaj ntawv 3 units. Qhov chaw nruab nrab ntawm cov lus yog 7 units.

A	• —	M	— —	Y	— • — —
B	— • • •	N	— •	Z	— — • •
C	— • — •	O	— — —	1	• — — — —
D	— • •	P	• — — •	2	• • — — —
E	•	Q	— — • —	3	• • • — —
F	• • — •	R	• — •	4	• • • • —
G	— — •	S	• • •	5	• • • • •
H	• • • •	T	—	6	— • • • •
I	• •	U	• • —	7	— — — • •
J	• — — — —	V	• • • —	8	— — — — • •
K	— • —	W	• — — —	9	— — — — •
L	• — • •	X	— • • —	0	— — — — —

SOS yog Morse code teeb meem teeb meem

SOS

• • • — — — • • •