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# Solutions
## Pavosa
1. The matching is:
3 \rightarrow danos
5 → hesos
7 → sedos
16 → ruyez sedelos
17 → ruyez hesos
19 → ruyez sedos
22 → ruyez raseos
24 → hezzasa
34 → hezzasa raseos
41 → dan ruyez hesos
48 → henez
88 → sedos ruyez sedelos
2. The translations are:
15 → ruyez danos
55 → henez ruyez sedos
64 → hesos ruyez sedelos
77 → dan hezzasa hesos
3. The number system is a base-12 (duodecimal system). A number n = 1
12q + r is written as:
ruyez + r if q = 1
hezzasa + r if q = 2
henez + r if q = 4
(q/2) + hezzasa + r if q is any other even number
q + ruyez + r otherwise.
The names of the numbers are:
3 → danos
4 → sedelos
5 → hesos
7 → sedos
10 → raseos
## Copainalá Zoque
(a) The translations are:
caky \land smatih = just above the vine
k \wedge m \wedge \eta \dot{s} = like the shadow
7 \times mok = mv corn
mis ndacta?m = your teeth
pahsunbit = with the squash
perolkotoyašehta?m = as if for the kettles
(b) The translations are:
for the chair = pokskukyotoya
with my kettle = ? \land s mberolpit
just like a mountain = koc∧kšehtih
posts = komda?m
above the shadows = knmngnsmnta?m
your town = mis ngumguy
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## Menominee

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(a) The translations are:
kekēskahæq = we_{1+2} break through it by tool / we drill through it
nepāhkenan = I cut it off / I open it by cutting
wæpāhpew = he begins to laugh
(b) The translations are:
I begin to eat it = newæpahtæm
we lay it flat by hand = kekāwenæq
he digs a hole = tawānæhkæw
he walks out = kætohnæw
# Observations
1. Copailaná Zoque
The structure of a noun phrase is:
possessive # root-preposition[-like/as if][-plural][-only/just]
The following sound changes take place (within and across words):
yk → ky
k \rightarrow g \mid N_{\underline{}} [N = m, n, n]
k \rightarrow \eta g \mid s_{-}
t \rightarrow d \mid N_{\underline{}}
t \rightarrow nd \mid s_{-}
p \rightarrow b \mid N_{\perp}
p \rightarrow mb \mid s_{-}
c \rightarrow nc \mid s_{-}
The vocabulary is as follows:
(i) Possessives
my = ? \Lambda s
your = mis
(ii) Nouns
cactus = nakpat
corn = mok
chair = pokskuy
kettle = perol
mountain = koc∧k
post = kom
shadow = k \wedge m \wedge \eta
sky = cap
squash = pahsun
tooth = t \wedge c
town = kumguy
vine = cay
(iii) Prepositions
with = pit
above = k \wedge s m \wedge
for = kotoya
(iv) Other
as if/ like = šeh
only / just = tih
plural = ta?m
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2. The structure of a verb form in Menominee is:
(person prefix) + A + B + (person suffix)
which can be translated as "X does A_verb, B_adverb" or as "X does
B verb, A adverb".
The vocabulary is as follows:
(i) Personal prefixes:
I = ne-
we_{1+2} = ke-
he = \Phi-
(ii) A
     adverb verb
Α
             fell/lay flat
kaw
kāw -
             fall/lie down
pīt here
             come/bring
kēsk through break through
pāhk off
             open
kEt out
             pry out/take out
wāp –
             begin
taw hole
wack around -
(iii) B
В
       adverb
                verb
       by tool -
aha
Ena
       by hand pass
Esa
                 cut
ānæhkæ digging dig
ahtæ in mouth eat
ohnæ
       walking walk
       laughing laugh
āhpe
                       [placeholder]
eqta
(iv) Personal suffixes
For ohnæ, āhpe, and eqta:
(I):-m
(we_{1+2}) : -q
(he) : -w
For other B:
(I) : -n
(we_{1+2}) : -q
(he) : -m
note: the verb coming after "begin" is considered an adverb and
expressed by B.
After constructing the word, the following sound changes take place:
1. If the first syllable is ke- or ne-, the second syllable becomes
long (\bar{}).
2. If the second syllable is E and:
the first contains a, \bar{a} or E, then the second syllable becomes \bar{E} and the first syllable loses \bar{\ } if it has it.
3. If the first two syllables are still both short, the second
becomes long ( ).
4. The ending -ag becomes -æg.
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