

2011 Solutions

(B) Mix Up on the Farm (1/3)

B1.

The following can be observed from the data below:

Word Order: Tohono O'odham allows many orders of subject, object, and verb. In order to simplify the data for this problem, the verb or the negative particle *pi* comes first in each sentence. In sentences that have subjects and objects, we have chosen to illustrate the word order of subject before object, although the other order is possible in naturally occurring sentences. The second word in the sentence is always an auxiliary particle ('o, 'ac, or 'añ, in this problem). The particle *g* precedes each noun that is not a pronoun.

Agreement between the auxiliary element and the subject: The auxiliary 'o is used when the subject is third person (not *I*, we, or you). The auxiliary 'añ is used when the subject is first person and singular. The auxiliary 'ac is used when the subject is first person and plural.

Plural nouns: The nouns *wakial* (cowboy) and *wisilo* (calf) are made plural by adding a *p* after the first vowel. The word *ceoj* (man) is made plural by adding a *c* after the first vowel. A linguist would describe the *p* and the *c* as *reduplicative infixes*. The *c* mirrors the initial *c* of *ceoj*. The *p*, which is made by putting your lips together, mirrors the initial *w* of *wakial* and *wisilo*, because *w* is made by rounding the lips.

Verbs with plural subjects: When the subject of *ñeok* (speak) is plural, the verb becomes *ñeñok*. When the subject of *cipkan* (work) is plural, it becomes *cickpan*. A more general way of describing this is that the first consonant is *reduplicated* after the first vowel.

Verbs with plural objects: This was a tricky part of this problem. The verb *ceposid* (brand) has a subject (*wakial*, cowboy) and an object (*wisilo*, calf). The first consonant is reduplicated after the first vowel when the object is plural. Also, when the object is plural, *ha-* is added to the beginning of the verb. *Ha-ceposid 'o g wakial g wisilo* means *The cowboy is branding the calves*.

Here are the Tohono O'odham sentences with their English translations in order:

- | | |
|--------------------------------------|--|
| 1. Ha-ceposid 'o g wakial g wisilo. | H. The cowboy is branding the calves. |
| 2. Pi 'ac ñeñok 'a:cim. | E. We are not speaking. |
| 3. Ceposid 'o g wakial g wisilo. | G. The cowboy is branding the calf. |
| 4. Pi 'o cickpan g cecoj. | F. The men are not working. |
| 5. Pi 'o ceposid g wapkial g wisilo. | D. The cowboys aren't branding the calf. |
| 6. Cipkan 'añ 'a:ñi. | C. I am working. |
| 7. Ñeok 'o g ceoj. | B. The man is speaking. |
| 8. Ñeok 'añ 'a:ñi. | A. I am speaking. |



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(B) Mix Up on the Farm (2/3)

How might you arrive at the solution? You might start by noticing that three of the English sentences contain the word *not*. You might guess that *pi* means *not* because it occurs in three Tohono O'odham sentences. The three English sentences containing *not* are *The men are not working*, *We are not speaking*, and *The cowboys are not branding the calf*. You could match up the longest English sentence with the longest Tohono O'odham sentence.

Pi 'o cependid g wapkial g wisilo. The cowboys are not branding the calf.

Now, one of these means *We are not speaking* and one means *The men are not working*.

Pi 'ac ñeñok 'a:cim.

Pi 'o cickpan g cecoj.

We occurs in only one English sentence, and 'ac ...'a:cim occurs only in one Tohono O'odham sentence. You might then conjecture that Pi 'ac ñeñok 'a:cim means *We are not speaking*. In that case, Pi 'o cickpan g cecoj would mean *The men are not working*.

Pi 'ac ñeñok 'a:cim. We are not speaking.

Pi 'o cickpan g cecoj. The men are not working.

Which words mean *speaking*, *working*, and *men*? *Speaking* occurs in three English sentences and *working* occurs in two. If you notice that ñeñok is related to ñeok, you can see that those words occur in three sentences.

Ñeok 'o g ceoj.

Ñeok 'añ 'a:ñi.

Pi 'ac ñeñok 'a:cim.

We are not speaking.

The three English sentences with *speaking* are *We are not speaking*, *I am speaking*, and *The man is speaking*. If you match ceoj in Ñeok 'o g ceoj with cecoj in Pi 'o cickpan g cecoj, you can conclude that Ñeok 'o g ceoj means *The man is speaking*.

Ñeok 'o g ceoj. The man is speaking.

Ñeok 'añ 'a:ñi. I am speaking.

Pi 'ac ñeñok 'a:cim. We are not speaking.

You can also match up the sentences with the words cikpan and cickpan with the two English sentences that are about *working*:

Pi 'o cickpan g cecoj. The men are not working.

Cipkan 'añ 'a:ñi. I am working.

That leaves the three longer sentences:



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(B) Mix Up on the Farm (3/3)

Ha-cecposid 'o g wakial g wipsilo.

Ceposid 'o g wakial g wisilo.

Pi 'o ceposid g wapkial g wisilo. The cowboys are not branding the calf.

Which word means *cowboy* and which word means *calf*? You have already observed that a plural noun can be made by adding an extra letter (ceoj/cecoj, man/men). You also know that the plural noun *cowboys* occurs in Pi 'o ceposid g wapkial g wisilo. This might lead you to match up *wapkial* with *wakial* (Spanish *vaquero*) meaning *cowboys/cowboy*. *Wisilo/wipsilo* would then mean *calf*.

Ha-cecposid 'o g wakial g wipsilo. The cowboy is branding the calves.

Ceposid 'o g wakial g wisilo. The cowboy is branding the calf.

Pi 'o ceposid g wapkial g wisilo. The cowboys are not branding the calf.

The tricky part is that *ha-cecposid* (branding with reduplication of the initial *c*) doesn't go with the plural subject (*cowboys*), but with the plural object (*calves*).

B2.

		Correct	Mistake
1.	Ha-cecposid 'o g wakial g wisilo. Brand-plural cowboy calf		X
2.	Cickpan 'añ 'a:ñi. Work-plural I		X
3.	Cickpan 'ac 'a:cim Work-plural we.	X	

The first sentence must be wrong because the verb contains the reduplicative *c*, but both nouns are singular.

The second sentence is wrong because '*a:ñi* means *I* and is singular, but the verb contains the reduplicative *c*.

The third sentence is correct.

Grading:

B1: 5/7 points per correct answer.

B2: 10/7 points per correct answer.

Total: 10 points

