Problem 3.

- 1st person sg:

    - if the word contains at least one voiceless consonant, the first one becomes nasal+voiced
      ($\langle \mathbf{p} \to \mathbf{mb}, \mathbf{t} \to \mathbf{nd}, \mathbf{h} \to \mathbf{nz}, \mathbf{x} \to \mathbf{nj}, \mathbf{k} \to \mathbf{ng}\rangle$)

    - otherwise the whole word is nasalised (**-m**)

- 2nd person sg:

    - if the word begins with a vowel different from **i** (**í**, **î**): **y-**

    - otherwise the first vowel different from **i** (**í**, **î**) changes as follows:

        * **a → e, á → é, â → eâ**;
        * **o → e, ó → é, ô → eô**;
        * **û → iû**;
        * **e → i, é → í, ê → î** (the same happens in the immediately following syllables).

(a)

1st person sg	2nd person sg		1st person sg	2nd person sg	
mbîho	₁**pîhe**	*to go*	*noínjoa*	₈**neíxoa**	*to see it*
₂**mbêyo**	*pîyo*	*animal*	*vanénjo*	₉**venéxo**	*to buy*
yênom	₃**yîno**	*wife*	*mómindi*	₁₀**mémiti**	*to be tired*
₄**ênom**	*yêno*	*mother*	*ínzikaxovoku*	₁₁**íhikexovoku**	*school*
ngásaxo	₅**késaxo**	*to feel cold*	₁₂**ônju**	*yôxu*	*grandfather*
njérere	₆**xíriri**	*side*	₁₃**nêwom**	*nîwo*	*nephew*
ndôko	₇**teôko**	*nape*	*ánzarana*	₁₄**yáharana**	*hoe*

(b) 1. 2nd person sg: in Portuguese loanwords **á → eá**; in native words **á → é, â → eâ**.

   2. **lándana, ngápana**.

Problem 4.

singular	plural	
-b	**-(a)bys**	**bø-bys** 'betel nuts', **juhuru-bys** 'eggs'
-h	**-(a)ruh**	**ara-ruh** 'sugar canes'
-g	**-(a)gas**	**bai-gas** 'sheets of sago bark'
-t	**-(o)gu**	**nyba-t** '4'

$$\left(\begin{array}{|ll|}\hline \textbf{anowip} & 6 \\ \textbf{wiwis} & 2 \times 6 = 12 \\ \textbf{araman} & 4 \times 6 = 24 \\\hline\end{array} + \begin{array}{|ll|}\hline \textbf{atu-} & 1 \\ \textbf{bi-} & 2 \\ 2 + 1_{\text{sg}} & 3 \\ 2 + 1_{\text{pl}} + 1_{\text{sg}} & 4 \\ 2 + 1_{\text{pl}} + 2 & 5 \\\hline\end{array}\right) \times \left\{\begin{array}{l} \textbf{baig(as)} \\ \textbf{bøb(ys)} \\ \\ (\textbf{nybat})\,4 + \left\{\begin{array}{ll} \textbf{atu-} & 1 \\ \textbf{bi-} & 2 \\ 2 + 1_{\text{sg}} & 3 \end{array}\right\} \times \left\{\begin{array}{l} \textbf{ara(ru)h} \\ \textbf{juhurub(ys)} \end{array}\right. \end{array}\right.$$