7. Waorani numbers (20 marks)

Waorani is spoken by about 600 native Americans in Ecuador. They have fewer single-word expressions for numbers than English, and are in fact said rarely to count above ten. However, in principle their number system can be combined, as in the following examples, with our mathematical symbols such as =, +, x and ^{2} (with their usual meanings; x and and ^{2} mean 'times' and 'squared'). Each of the underlined expressions below represents a number less than ten.

(1) <u>mẽña mẽña mẽña mẽña</u> + <u>mẽña go mẽña</u> = <u>ãẽmãẽmpoke go aroke</u> x 2

(2) <u>aroke</u>^{2} + <u>mẽña</u>^{2} = <u>ãẽmãẽmpoke</u>

(3) <u>ãẽmãẽmpoke go aroke</u>^{2} = <u>mẽña go mẽña</u> x <u>ãẽmãẽmpoke mẽña go mẽña</u>

(4) <u>mẽña</u> x <u>ãẽmãẽmpoke</u> = tipãẽmpoke

Question 7. (Write your answers on the separate answer sheet.)

Give the Waorani translations of the numbers from 4 to 10 inclusive.

4 =	8 =
5 =	9 =
6 =	10 =
7 =	

SOLUTION

How to mark an UKLO script

Terminology

- **target**: the correct answer; e.g. 'A B C d' (where X, Y and Z are wrong)
- **script answer**: the answer in the script you're marking; e.g. 'A X C D'.
- **point**: a number that you assign, which the spreadsheet eventually translates into a 'mark'; e.g. 1 for A
- **unit**: a part of the target that carries a point; e.g. A, X and C. Typically a unit is a word, a phrase or a word-part.
- **sign**: a 'mark' that you make on each unit in the script.
  - **tick**: on a completely right unit; e.g. on A and C
  - **cross**: on a completely wrong unit; e.g. on X
  - **half**: on a partly right unit; e.g. on D (for d)

Example:

✔	✘	✔	½
A	X	C	d

- **score**: the number you assign to the entire script, following the directions in the marking scheme.

Principles

- Each correct unit or partly right unit in the script answer increases the score.
- Completely wrong units in the script answer are penalised simply by not increasing the score.
  - e.g. A X C d scores 3 because X scores 0.
- Similarly, units in the target that are missing from the script answer are penalised simply by not increasing the score.
  - e.g. A C d scores 3 because only A, C and d score anything.
- But if the script answer contains more units than the target, the surplus units should be penalised.
  - e.g. A B C d X scores 3 because X scores -1, though A B C d score 4.
- No score should be worse than a completely blank answer, so there are no negative scores.
  - e.g. A B C d X Y Z Z Z scores 0, because although each X, Y and Z reduces the score by 1, the effect stops when the score reaches 0.

How to score

1. Follow the marking sheet for
   a. recognising units
   b. assigning ticks and halves
   c. assigning points for ticks and halves.

2. Count the units in the script answer and compare this number with the number of units in the target. If the script answer contains more units than the target, go to 4. Otherwise (i.e. in the vast majority of cases) go to 3.
3. Add up all the points for ticks and halves. That's the score.
4. As in 3, but then deduct the number of surplus units, i.e. the difference between the numbers of units in the script answer and in the target.

7. Waorani numbers (20 marks, 21 points)

- Units: item 4-10
- Points per unit: 3. No ½ marks – not even if the only error is the omission of *go*.
- Accept: missing accents etc.

$4 =$ mẽña go mẽña	$8 =$ mẽña mẽña mẽña mẽña	
$5 =$ ãẽmãẽmpoke	$9 =$ ãẽmãẽmpoke mẽña go mẽña	3
$6 =$ ãẽmãẽmpoke go aroke	$10 =$ tipãẽmpoke	
$7 =$ ãẽmãẽmpoke go mẽña		