

(K) The Dualization Game (I/2)

K1. Any three nouns that end in x, s, or z and take an -es plural ending – ideally one each for each of those three last letters. For example, buzz ⇒ buzzes, class ⇒ classes, tax ⇒ taxes.

K2. * quiz ⇒ quizzes, * child ⇒ childs

K3. * nidaahné ⇒ niahné, * nidaniiché ⇒ niniiché

K4. Complete Dualizer Machine 2.0 (cells not given in question are bolded):

Entry state	Read	Write	Move	Exit State
S0	d	∅	R	S1
S0	[otherwise]	[N/A]	R	S0
S1	[otherwise]	∅	L	S2
S2	[otherwise] or ∅	[N/A]	L	S3
S3	i	[N/A]	L	S4
S3	[otherwise]	[N/A]	[N/A]	HALT
S4	n	[N/A]	R	S5
S4	[otherwise]	[N/A]	[N/A]	HALT
S5	[otherwise]	a	[N/A]	HALT

K5. Complete Second-Personizer Machine (cells not given are bolded):

Entry state	Read	Write	Move	Exit State
S0	s	ʔ or others¹	R	S1
S0	[otherwise]	[N/A]	R	S0
S1	h	∅	L	S2
S1	[otherwise]	[N/A]	L	S2
S2	[otherwise]	[N/A] or ʔ	L	S3
S3	í	[N/A]	[N/A]	HALT
S3	[otherwise]	[N/A] or i	L	S4
S4	i, í	[N/A]	[N/A]	HALT
S4	y	n	[N/A]	HALT
S4	[otherwise]	[N/A]	R	S5
S5	[otherwise]	í	[N/A]	HALT

¹Any other letter, [N/A], and ∅ are all acceptable answers here – however, if an answer other than ʔ is given, the Write column of S2 must be ʔ. If ʔ is given in S0 Write, either answer is acceptable for S2 Write.



(K) The Dualization Game (2/2)

K6. *íísínísts'áá'* will be transformed unsuccessfully. Both verbs have predictable second-person forms (*íísíníłts'áá'* and *bigháníłdééh* respectively), but the machine will attempt to apply its transformations on and around the first s in *íísínísts'áá'*, rather than the second s. The unsuccessful output for this verb will be *ííłínísts'áá'*.

