

=a a][fUh]cb
6cgUX



6cgUX! : < nfiU

9b[Yg_U

=Lb `cc_]b[`Zcf`U`SSSSSSSSSSSSSS`hc`fYbH'

SSSSSSSSSSSSSS`

5fUW]g_U

..

5 b[Y`UthXi `j `]``\nfU`bA[cbh]b[

fcca

Hnd`Uj `VcgUX

ZUh#LdUfha Ybh

Hnd`Uj `VcgUX

gi X]c`ZUh#gi X]c`LdUfha Ybh

Hnd`Uj `VcgUX

XYUWYX`lci gY

Hnd`Uj `VcgUX

gYa]!XYUWYX`lci gY

Hnd`Uj `VcgUX

hffUWX`lci gY

Hnd`Uj `VcgUX

<ck `a i W`]g`h`Y`fYbidYf`a`cbh`3

: fA[U`i f`a mW`Yh`mfUb``][[Yf`dA

5 fY`i`h`]h`Yg`]bW` XYX3

: fA[Uf`ca `cg`bUXYf`ZOf`Y`z[Uj`cW`j` UthYb`]b[Af

<ck `a i W`]g`h`Y`XYdcg]h3

: fA[U`i f`a mW`Yh`XYdcg]h]cbYb`Af

=a a][fUh]cb
6cghUX



K \Yb`Wb`=Vta Y`Zcf`Uj`]Yk`]b[`3

: fÁ[U`bÁf`Xi` `Ub`gY`VcghUXYb

H\Y`UdUfha`Ybh]g`SSSSSSSSSSSSSSSS"

"SSSSSSSSSSSSSSSS"

5 b[Y`ca` `VcghUXYb`Áf`a` ÒV`YfUX`Y`Yf`ca` ÒV`YfUX

Z`fb]g\YX

@Á[Yb\YhYbg`g`_W_

i bZ`fb]g\YX

@Á[Yb\YhYbg`g`_W_

5 fY`dYhg`U`ck`YX3

: fÁ[U`ca` `i` gX↑`f`Áf`h` `ÁhbU

< ck` `Wb`=gk`]hW`h`Y`YbYf[`m]g`dd`]Yf3

: fÁ[U`i` f`Xi` `Ub`VntU`YbYf[`]Y`YfUbhÖf

< ck` `a` Ubmich\Yf`hYbUbhg`UFY` `]`]b[`]b`h`Y`
UdUfha`Ybh3

: fÁ[U`i` f`a` Áb[U`UbXfU`dYfgcbYf`gca` `Vcf`]`Á[Yb\YhYb

< ck` `a` Ubmj`]Yk`]b[`g`Ug`]h\UX3

: fÁ[U`i` f`a` Áb[U`UbXfU`dYfgcbYf`gca` `Uf`j`Uf]hcW`h]hUhdÁ`Á[Yb\YhYb

7 U`b`=gY`Y`Wf]W` `UbX`[`Ug`]bgU`U`h]cb
WYW`g`f`Ydcfng3

: fÁ[U`ca` `Xi` `Ub`ZÁ`_c` `U`dÁ`]bgU`U`h]cbg`_cbhfc` `YfbU`#`UddcfhYfbU`ZÖf`Y`Yb`cW` [`UgYb

⇒a a][fUh]cb
6cgHUX



< ck `cb[`]g`h`Y`YUjY3

: fÁ[U`i f`Àb[Y`_cbhfU`h`h`Áf

< Uj Y`h`YfY`VYyb`UbmbY][`Vcf`X]gdi hYg3

: fÁ[U`ca `XYh`UF`j Uf]hbÁ[cb`cg`Aa `U`a Y``Ub`[fUbbUfbU

K `Uh`fYbcj Uh]cbg`Uj Y`VYyb`XcbY3

: fÁ[Uj `]`_U`fYbcj Uh]cbYf`gca `UF`[`cfhg

< ck `c`X`]g`h`Y`Vc`]`Yf`UbX`k `Yb`k Uj]h`Ugh
]bgdYVWYX3

: fÁ[U`i f`[Ua a U`dUbbUb`Áf`cW`b`Áf`XYhgYbUghj Uf`]bgdY`h`fUX

K `Yb`k Uj]h`Ugh`fYk]fYX3

: fÁ[U`b`Áf``Á[Yb`YhYbg`YXb]b[Uf`gYbUghj Uf`ca `_cdd`UXY

K `c``]j Ygi dgU]fg#Xck bgU]fg#bYI hXccf3

: fÁ[Uj Ya `gca `Vcf`]`Á[Yb`YhYb`cj UbZÖf#fYXj]X# bXYf

#

#

⇒g`h`YfY`U`dUf_]b[`gdUW`]bWV XYX3

: fÁ[U`ca `XYhZ]bbg`Yb`dUf`_Yf]b[gd`UhgZÖf`X]b`V]`

< Uj`UbmcbY`Yj Yf`VYyb`a i fXYfYX`YfY3

: fÁ[U`ca `bÁ[cb`UF`V`]j]hia ÖfXUX`XÁf

8cYg'SSSSSSSSSSS`k cf_3

'SSSSSSSSSSSSSSSSSSSS'

: fÁ[U`ca `ZUW`]h`h`YfbU`Z` b[YfUF

⇒ a a][fUh]cb
6cgUx



hY'd'i a V]b[

: UWy]hYhf

hY\YUh]b[

: UWy]hYhf

⇒g'hY`UbX'cfX']b'VXUf[Y'cZXc]b['fYdU]fg3

: fÁ[Uj Ya 'gca 'Áf'Ubg Uf]['ZÖf'Uhi[ÖfU'fYdYfU]cbYf

K \YfY'UFY'h.Y[Uj'UbX'Y'VWf]V]hnia Yhf3

: fÁ[Uj Uf'Xi '[Uj 'cVX'Ya ÄhUfbU'Áf

8c'mei '\Uj Y'Ubm]bgfi V]cb'a Ubi U'g'cf'k UffUbh]Yg
cb'Y'VWf]VW']hYa g3

: fÁ[U'ca 'X'YhZ]bbg'Vfi _gUbj]gb]b[Uf'cVX '[UfUbh]Yf'ZÖf'XY'YY_hf]g_U'UddUfUhfUfbU

'K \c'g' dd']Yg'h.Y'YbYf[nž'VfcUXVUbX'UbX'\ca Y
d\cbY3

: fÁ[U'gca 'Y] YfYUf'YbYf[]ž'VfYXVUbX'cVX'\Ya h'YZcb

K \YfY']g'h.Y'h.Yfa cgUx3

: fÁ[U'ca 'Xi '_Ub'gY'hYfa cgUxYb

7Ub'⇒gY'h.Y[Uj'gUZYhmiVWf]Z]VWY3

: fÁ[U'ca 'Xi '_Ub'gY'gÄ_Yf\Yhg]blm[Yh'ZÖf'[UjYb

6cgUx! ? ÖdU

9b[Yg_U

5fU]g_U

⇒ a a][fUh]cb
6cghUX



< ck 'a UbmicZZYfg'\Ug]h\UX3

: fÁ[U\i f'a Áb[Ugca '\Uf'Vi XUhdÁ\i gYh

< ck 'cb['\Ug]hVYyb'cb'hY'a Uf_YrB

: fÁ[U\i f''Áb[Y\i gYh\Uf'j Uf]hi hY'dÁ'a Uf_bUXYb

K \miUfY'hY'j YbXcfa cj]b[3

: fÁ[Uj UfZÖf'XY'gÁ'Yf\i gYh

< ck 'cb['\Ug'hY'gY'Yf''j] YX'hYfY3

: fÁ[U\i f''Áb[Y'gÁ'UfYb'\Uf'VchIXÁf

K \Uf]bWl XYX'j]b'hY'gU'Y3

: fÁ[Uj UX'gca 'Áf']b_i XYfUh] '_ÖdYh

< Uj Y'hYfY'VYyb'Ubmig Vg]XYbW'dfcV'Ya g3

: fÁ[Uca 'XYh\Uf'j Uf]hbÁ[chdfcV'Ya 'a YX'gÁhb]b[UfbU'dÁ\i gYh

⇒g]hdcgg]V'Y'hc'Z]bX'WYUdYf'hfUbgZYff]b[3

: fÁ[Uca 'Urh\]hU'Yb'V''][UfY'Ö] YfZÖf]b['Uj 'Y[YbXca Ybg'Á[UbXYfÁth

K \Uh]g[c]b['hc'VY'Vi]'h]b'h.]g'UfYU]b'hY'Zi hi fY3

: fÁ[Uj UX'XY'i h] YW_]b[gdfc'Y_hyb'ZÖf'XYhU'ca fÁXY'Áf

7Ub'mci 'hU_Y'hY'\ci gY'cZZ'hY'a Uf_YrB

: fÁ[Uca '\i gYh_Ub'hUg'VcfhZfÁb'a Uf_bUXYb

⇒ a a][fUh]cb
6cgUX



K \YfY'X]X'h.Y']hWYb'UbX'VUhfcca 'h'Yg'Vta Y
Zfca 3

.
.

: fÁ[Uj Uf'XY'h]X][UfY'À[UfbU_ÒdHY'_Ò_g' 'cVW'VUXfi a g_U_`Yh

K \YfY'X]X'h.Y'Z]l YX'Z fb]h' fY'Vta Y'Zfca žY"["
_]hWYb'VW]bYhg3

.
.

: fÁ[Uj Uf'XY'h]X][UfY'À[UfbU_ÒdHY'XY'Z]gU'a ÒV'YfbU