

BY[cV]cg 9a Uj`

9a Uj` ! 9bVVYnLa]Ybhc`Y`]bhfCxi Wj` b

:]b`UbXAg

7 \ Wt

5 fj c]gU` < YffU`DfYg]XYbHj

J 1/2YbU`dUbY`dfYn]XYbHž

A i mZcfa UžY`XYg]bUUF]c`fYVY`i b`h`i`c`YgdW]U`ei Y`XYVY`gYf`i gUxc`f`bhc`Ug`bca Vfy`c`g`g]h`nAbXc`c`"

< nj`À` < YffUž

J 1/2YbU`dUbYž

: cfa UžXYg]bUUF]c`a UjW`]bcž`bca Vfy`XYgWtbcV]Xc`"

< nj`À`F`ci`j`U`

J 1/2Yb1/2dUbÉž

: cfa UžXYg]bUUF]c`ZYa`Yb]bcž`bca Vfy`XYgWtbcV]Xc`"

< nj`À` < YffU`#F`ci`j`U`

J 1/2YbU`dUbY`#J 1/2Yb1/2dUbÉž

: cfa Užbca Vfy`mgYl`c`XY`XYg]bUUF]c`XYgWtbcV]Xcg`"

< nj`À`hj`Ug]UbchU`Už

8cVfU`XYbž

: cfa UžU`X]f][]fgY`Uj`Uf]Ug`dYfgcbUg`XYgWtbcV]XUg]c`U`i`b`XYdUf]La`Ybhc`"

< nj`À`hj`Ug]UbchU`Už

J`Ya`nU]bhYfYgcj`UbUa`g]fUb1/2`ž

: cfa Užbca Vfy`m[`AbYfc`XY`XYg]bUUF]c`hcU`a`YbH`XYgWtbcV]Xcg`"

< nj`À`YffU`Ga`]Hž

J 1/2YbU`dUbY`Ga`]Hž

: cfa UžXYg]bUUF]c`a UjW`]bcž`bca Vfy`WtbcV]Xc`"

< nj`À`fci`j`UGa`]Hž

J 1/2Yb1/2dUbÉGa`]Hcj`1/2ž

: cfa UžXYg]bUUF]c`ZYa`Yb]bcž`Wg]XUž`bca Vfy`WtbcV]Xc`"

< nj`À`bY]h`Ga`]Hž

J 1/2Yb1/2g]Yébc`Ga`]Hcj`1/2ž

: cfa UžXYg]bUUF]c`ZYa`Yb]bcž`gc`hYfUž`bca Vfy`WtbcV]Xc`"

< nj`À`bY]h`#fci`j`UGa`]Hž

J 1/2Yb1/2dUbÉGa`]Hcj`1/2ž

: cfa UžXYg]bUUF]c`ZYa`Yb]bcž`bca Vfy`WtbcV]Xcž`Yg]Uxc`V]j`]`XYgWtbcV]Xc`"

< nj`À`>c\b`Ga`]Hž

A`J`U`>c\bY`Ga`]Hž

A`YbcgZcfa Užg]`gY`U`H]b]Xc`hfUc`Wtbc`Y`XYg]bUUF]c`dfYj`]La`YbH`"

< nj`À`>c\bž

A`J`U`>c\bYž

=bZcfa Užg]`gY`Yg]La`][`c`XY`XYg]bUUF]cž`dcWt`Wta`Čb`"

BY [cV]cg 9a Uj`



? [f^c]hla a Y'hj`Y`]]hmYb`""
: cfa U`zYb`bca Vfy`XY`hcXU`U`Vta dU` E`U`

C VFUM`a Y'gY`bUj 1/2c`YXb÷`""

? [f^c]hla a Y'hj`Y`]]hmYb`""
: cfa U`zYb`bca Vfy`XY`hcXU`U`Vta dU` E`U`

DÉ Ya Yj 1/a j Y'gdc`hcgj`g`""

? cg_]Yb`""
: cfa U`z]bffcXi Wj`i b`U`WYbXc`fYZYfYbVU`U`U`[c`ntU`V`bcV]Xc`c`ei Y`gY`U`j]g`c`Yb`U`Vta dU` E`U`U`V`b`h`U`W`U`F`

J `b`1/2`U`h`bc`g`j`b`U`""

J]]huhb`""
: cfa U`z]bffcXi Wj`i b`U`WYbXc`fYZYfYbVU`U`U`[c`ntU`V`bcV]Xc`c`ei Y`gY`U`j]g`c`Yb`U`Vta dU` E`U`U`V`b`h`U`W`U`F`

J `b`1/2`U`h`bc`g`j`b`U`""

? [f^c]hla h`h`YXi gY`U`_gYb]`""
A YbcgZcfa U`z]bffcXi Wj`i b`Yb`h`i`bca Vfy`Yb`fYdfYgYbU`Wj`i b`XY`U`Vta dU` E`U`

DÉ]j 1/a žUVnW`j 1/2]bZcfa cj U`c`""

? [f^c]hla `Yb_]`C`b`""di c`YgU`""
: cfa U`zU`YgW]V]f`Yb`bca Vfy`XY`c`f`c`

DÉ]J 1/a `a`A`b`Ya`""

""g`cg]hY`j`mf]mg]AbbY`Aa`d]a`Ag]`""
: cfa U`z]bffcXi Wj`i b`YXi`W`X`U`

J U`Y`gdc`Y`ébcg`h`a`j`V`m]U`X`cdcf`i`é`Yb`U`""

9a Uj`!`7`i`Y`f`d`c`

:]b`UbX`A`g`

7`U`W`U`

C`]g]_c`U`b`a`U`X`c`]`g`U`""
Gc`]V]h`i`X`Zcfa U`z`h`b`h`j`c`

J U`X]`c`V`m] 1/a ž`X`n`V`n`i`""

C`]g]hY`_c`mg]A`j`A`]`g]A`U`""
Gc`]V]h`i`X`Zcfa U`z`h`b`h`j`c`

6m`f`U`L`V`ng`h`Y`h`U`_`U`g`_`U`j`f`h`z`U`""

C`]g]b`Y`f]h`A]b`_]`h`c`]`b`Y`b`z`^`cg`""
Gc`]V]h`i`X`Zcfa U`z`h`b`h`j`c`

6m]`V`n`W`c`a`j`1/a`j`Y`a`j`n`U`j`1/2]b]z`X`n`V`n`i`""

5`fj`cg]U]g]a`a`Y`_`c]`U`g]z`^`cg]c]g]hY`^`A`Y`h`A`a`Y`Y`
]g]h`Y`h`c`U`_`cg_]Yb`""
Gc`]V]h`i`X`Zcfa U`z`a`i`m`Y`X`i`W`X`c`

6m]`V`n`W`c`a`j`X`÷`é`b`É`_`X`n`V`ng`h`Y`b`1/a`a`c`^`d`c`g]h`
d`c`X`f`c`V`b`÷`^`É]bZcfa U`W`c`""

C`]g]b`g`i`f`Y`g]`_]`h`c`]`b`Y`b`z`^`cg]c]g]hY`""
Gc`]V]h`i`X`Zcfa U`z`a`i`m`Y`X`i`W`X`c`

6m`f`U`L`V`n`W`j`1/a`j`X`÷`é`b`U`f`h`z`_`X`n`V`ng`h`Y`a`c`^`f`U`L`""

BY[cV]cg 9a Uj`



J c]g]hY_c`m]A] A`]g]g]`A\YhAA'a]bi ``Y`"
Gc`]V]h] X`Zcfa U`Z]YXi W]Xc

A c\`fUL`Vng]Y'a]`dfcg]a `dcgUH`"

C`Ya a Y`_]bbcg]h] bY]h]U]j U]g]U]b]c]h]U]a U]b`"
Gc`]V]h] X`Zcfa U`Z]YXi W]Xc

A 1/a Y'n1/2Ya `c`n]Eg_1b]E]c]V]Xf YbE`"

C`Ya a Y`_]bbcg]h] bY]h]U]j U]g]U]b]c]h]U]a U]b`"
Gc`]V]h] X`Zcfa U`Z]YXi W]Xc

A i g]a] j 1/2dc 1X]U]z]n]XU`"

<Ui Ub`_ng]A]j c]g]_c`"
Gc`]V]h] X`Zcfa U`Z]X]f]Y]V]t

A c\`fUL`Vng]Y`X]c]d]c]f]i e]h`"

J c]g]hY_c`g] c]g]hY`U`"
Gc`]V]h] X`Zcfa U`Z]X]f]Y]V]t

A c\`fUL`Vng]Y'a]`dfcg]a `dcgUH`"

Dm]x]A]a a Y`h]h]A]j A`]h]O]a A]g]`"
Gc`]V]h] X`Zcfa U`za i m]X]f]Y]V]t

BU]A]U] ÷]j 1/2j 1X]1/a Y]Z]U]W]ng]Y`"

C`]g]a a Y`_]h]c``]g]U`^cg`"
Gc`]V]h] X`Zcfa U`Z]YXi W]Xc]z]Y]b]c]a V]f]Y`X]Y`U`W]t]a d]U] E]U

6m]`V]n]W]ca] X`e]b]E]Z`_X]n]V]n`"

A]_A]c]b]h]A]a A]b]Y]h]_]b]Y]b``]g]h]U]b]h]U]b]b]Y`"
Gc`]V]h] X`Zcfa U`m]Y]g]d]Y]W]Z]W]Z]X]f]Y]V]t

>U`U`Y]j 1/2_U`h] 1/2b]E]W]b]E`_`dfc`"

C`Ya a Y`_]bbcg]h] bY]h]U]j`"U\U]i U]g]a a Y`h]Y]h]A]A]`"
D]Y]h]V]h] b`Z]cfa U`Z]X]f]Y]V]t

A 1/a Y'n1/2Ya `c`"U]W]h`:]`V]n]W]ca] ÷]X`÷]h`"

Ma a A]f]g]a a Y`a U]bc_g]Y]g]h]U]b]b]Y]Z]Y]h]A]h]U]f`^c]U]h]Y`"
D]Y]h]V]h] b`Z]cfa U`Z]X]f]Y]V]t

Dc]W]c]d]j]`^]g]a Y]n]j]b]n]Y]f]1/a z` Y]j 1/2`d]f]c]X]i _]h]Y`"

H]U]c]h]h]Y]b]U]a a Y`c]b`"
8 Y]W]U]f]U]V]h] b`X]Y`]b]h]Y]b]V]h] b`Z]cfa U`Z]X]f]Y]V]t

BU]E]a `n]1/a ÷]f]Y]a `Y]Z]U]W]n`"

<U]f`_]h]g]a a Y`Y]X]c]h]i g]h]U]b]b]Y]h]U]f`_U]b`^U`"
: c]f]a U`Z]e]i Y`Y]j U]U]i b]U]X]Y]W]g]h]i b`Y]b]f]Y]U]W]h]i b`U]i b`U]W]Y]f]X]c`X]Y]b]Y]c]V]c]g

D]Y]E`]j ÷`^]g]a Y]r]j 1/2`]j 1/2`b]1/2`f`^U`"

J U]j]h]h]U]j U]g]h]`^c]i Xi a a Y`]a c]h]U]a U]b]z]Y]h]A]A]`"
: c]f]a U`Z]f]Y]W]X]U]h]c`X]Y]i b`U]W]Y]f]X]c`X]Y]b]Y]c]V]c]g`c`Z]U]h]U]X]Y`]b]h]Y]f]A]g]Y]b]i b]U]c]Z]Y]f]U

>Y]b]1/a `^]f]c]j 1/2]j]b]Z]c]f]a c]j U]z` Y`"

BY[cV]cg 9a Uj`



@]HhYXcgr'cb''''a i cXcggJ'

D Éc\U'Yj YZcfa ½á''''

: cfa UžgY'Yi d`]WV'Vb'ei Á'dfc[fUa U'XYV'Y' XYgh]bUuf]c'UWf]fi b'U'VW]j c'UX† bhc

9bj c]bi hUj Uu`À\YhÁa ÁAbbY`]]HhYXcgrU
Ua i ``U'J]fi ghYbrcf† bHc\Y'a Ub]`Čngj
H]YXcgrcgUj]fi _gYb"

8bYgf'½bc'gYa 'bYa c\ fUk'chYj ěhXUbc i'd Éc\i "A ^
Ubhj]fcj Udfc[fUa 'hc'XYH_cj U`'U_cj]fi g'

: cfa UžX]fVWkžgY'Yi d`]W]i b'dfcV'Ya U'Vb'i b'U'VW]j c'UX† bhc

DmxAAb'UbHY_gjžYHb`À\YhÁbmnj]Ygh'À'UjYa a]bž
a i HhU_]f'c]h g]f\Yyb'hU_]Uj]Ygh'dUu hi]
\i ca]c`U`hi bhYa Urcb] UghUbcHhU"

Ca`ci j ½a 'g'nUhcž Y'gYa 'bYd YdcgUfUk'ndf'½pi X ěj Yž
UY_j `]d Y`Ydi Vm'Y!a Uj] f'½Mb'U'crbUeYb'U_c''cX
bYrb'½a Á'ci]j UHY''''

: cfa UžYXi WkXc

@]gAhYrc'Yb'hUfdYYggUj]YfUj`_U
j Yf_cg]j i]`Ua a Y'cgc]HhYggU''''

Dfc'XU É]bZcfa UWdfcgá 'bUj Hj H'BU Yk Wcj Á
gf'½_mbUUXfYgY''''

: cfa Uždfca cV]i b'XY'g']g]h'c'k YV"

9a Uj`! 7]YffY

:]b`UbXÁg

7\Wk

>cgHufj]hgYH'`]gAhYrc'UžchtU_U'mhYmth'Á'a]bi i b"

Dc_i X'Vi XYH'dch Wcj UhXU Édca cWbYj ½Y'HY'g'bu
a ÷'cVf'½]h'

: cfa Uža i mYXi WkXc

CHU_U'ngHj Á`]gYgh'mhYmth'Á'cgj c]a a Y'c`U
j]Y'Á'Uj i _g]"

>Ygh] Ya Ya YVUh'U_c`]j 'b'½dca cWÉXY'HY'b'½
dfcgá j ÷X÷H'

: cfa Uža i mYXi WkXc

?]]HhYb'c'Yh' _ÁHYb''''

8÷_i]J ½a 'd YXYa''''

: cfa Uža i mYXi WkXc

C`Yb'_ÁntYhÁj]ggAbbY'cgHufj]hgYH'`]gAhYrc'U
Uj]UghU"

Dc_i X'Vi XYH'dch Wcj Uh'U_Á_c`]j 'XU É]bZcfa UWž
bYj ½Y'HY'a ÷'_cbHh_hcj Uh'

: cfa Uža i mYXi WkXc

C`]g]b'ÁÁf]a a Á]gYb`_]]rc`]]bYb'cgj c]g]HhY'chtU
Uj]UghU'gYj ÁÁ'b]]b'bcdYUgh']_i]b'a U'Xc`]]ghU"

6m'fUk'VnW]j Ya]j X÷ébU'fWždc_i X'VngH'g'Y'dcXĚj UfUk'
bU'h hc'n'½Y]hcgH'Wk'bY'X ěj Y'

: cfa Uža i mYXi WkXc

BY[cV]cg 9a Uj`

DmmXÅa a Y'Y]hÅj UghUa Uubj]]dna ÅhÅžg]`Å""
: cfa UžYXi WUXc

CXdcj :-nY'dfcgĚ Vč'bY'X ě Yždfcfc Y""

>cg'fufj]hgYHY`]gÅ]Yrc'UžcHU_U'a]Yi i g]m\YmthÅ
a]bi i b"
: cfa UžYXi WUXc

Dc_i X'a ½Y'n½Ya 'c:XU É]bZcfa UWžbyj ½Y'HY'a ÷
_cbHU_hcj UH'

CXchub']bbc`U'a U\Xc`]gi i HUHmCg_YbbY`Å
_UbggUbbY"
: cfa UžYXi WUXc

H÷ ěa 'gy'bu'a c bci 'gdc'i df'WY'

?]]hcg'Uj i ghubbY'hÅggÅ'UgjUggU'
: cfa UžYXi WUXc

8÷_i 'j] ½a 'nUJ U]'dca cVj 'hÅc'n½Y]hcgj''

CXchub']bbc`U'dÅAgYj Åb]_Yg_i gh'Ya Uub'U]\YyghU
_UbggUbbY"
: cfa UžX]fWtč

H÷ ěa 'gy'bu'gW n_i ž_XY'hc'Vi XYa Y'a cV]dfcVfUH'

>cg'fufj]hgYHY`]gÅ]Yrc'U""
: cfa UžX]fWtč

Dc_i X'Vi XYHY'dch Wcj Uhj ěW]bZcfa UWĚ""

5 fj cg'Ua a Y'Uj]U__i i HhubbY"
: cfa UžX]fWtč

J ½ěa Y'gj] U ědf'WY'

CHU_U'a]bi i b'm\YmthÅ'di \Y]bbi a YfcggU""
: cfa Uža i mX]fWtč

DfcgĚ ž_cbHU_hi 'HY'a ÷!'a ^HY'Zcb'gd ěa ci 'j c'Vci
ěg'c'Y""

CXchub']bbc`U'd]U]ghU'm\YmXYbcHcUbbY"
A Ybcg'Zcfa UžYXi WUXc

H÷ ěa 'gy'bu'J U ěcXdcj ÷ë"

MghÅj Å`]gj]b'HYfj Y]gj]ž
: cfa Užbca Vfy XY' XYg]bUhf]c'XYgWtbcV]Xc

G'dcnXfUj Ya ž

MghÅj Å`]gj]b'HYfj Y]gj]ž
: cfa Uža i mi gUXcžXYg]bUhf]c'VtbcV]Xc

GY'gfXYébUa 'dcnXfUj Ya ž

? i bb]c]HUj Ughž
: cfa Užbc'hub'i gUXcžXYg]bUhf]c'VtbcV]Xc

G'ÖMti ž

BY[cV]cg 9a U]



DUFUJb'HYfj Y]g]bž

GY'gfXYébUa 'dcnXfUj Ya ž

-bZcfa U žYbhfY'gcV]cg'XY'bY[cV]cg'ei Y'gY'hi hU

HYfj Y]g]bž

G'dcnXfUj Ya ž#NXfUj Éa ž

-bZcfa U žYbhfY'gcV]cg'XY'bY[cV]cg'ei Y'hfUWU'ub'† bhcg'U'a Ybi Xc