

6Yj 1bXcf`1/9
HUi `1/9

HUi `1/9! '9[mYHya

X1b

>[' j] ` [YfbY`bXg_f]j YgdÁ`Yhi b]j Yfg]hYh'
6Y]fUh_cn1/9

YgdYfUbi

A]` Uih gYbg_f]V]ù]`Ybi b]j Yfg]hUrc"

>[' j] ` [YfbY`g0 [YZU] YhSSSSSSSSSSSSSSS"
>`Ybh_YnAg`_AdnAgfY

A]j c`Ug]Ud`_]`dcfSSSSSSSSSSSSSSS"

VUWY`cf

? ÁdnÁg]hÉdi gU

_i fg`dcf`gi XYbrc^

_UbX]XUg]i XYfYbXY

? ÁdnÁg]hÉdi gU

_i fg`dcf`dcg]X]d`ca U`gi XYbrc^

d\"X"!`gi XYfYbXY

? ÁdnÁg]hÉdi gU

_i fg`dcf`D\"8"

Z `X]Xg]

? ÁdnÁg]hÉdi gU

d`YbhYa dU`_i fg

XY]Xg]

? ÁdnÁg]hÉdi gU

dU]hYa dU`_i fg

cb`]bY

? ÁdnÁg]hÉdi gU

YbfYU`_i fg

>[' j] ` [YfbY`gi XYfY`dÁ`XYHv`i b]j Yfg]hYh]
SSSSSSSSSSSSS"

7gfY]X gnU`_`cggnU

A]` Uih ggi X]`âYj]Uih b]j Yfg]hUrc`Xi a `SSSSSSSSSSSSS"

YhgYa YgYf

7gfY]X gnU`_`cggnU

gYa YgYf`c

Yhgi X]YÁf

7gfY]X gnU`_`cggnU

U`UXYa]U`U`f`c

<j UX`Yf`UFVY`XgYg]f]_h]cbYfbY`Zcf`gi XYfYbXY3

A i b`Uj 1/2U`1/9]X]1/2c`_fÁgnÁfY

?]c`Yg]Ug`U`UWcf`c`]a]]c`^`dcf`gi XYbrc`^3

6Yj 1bXcf`1/ø HUBi `1/ø



G_U`Y[j]gY`cd]Yf`UZXY`cf][]bUY`Xc_i a YbhYf
Y`Yf`gY`j YXY`cf][]bUY`Xc_i a YbhYf3
8c_i a Ybh a c_

ä i `a]XYj Uj`a cbhf]`_cd]c`b`XY`U`cf][]bU`U`Xc_i a Ybhc`
U `U`cf][]bU`U`b`Xc_i a Ybhc`b`a Ya 3

<j UX`Yf`cd]U[Y`gY`g`fUj YbY`h`i`i` b]j Yfg]hYhY3
9[nYhYa fY`j U`i`Y`Ybh`Yn`Äg`cf

?]c`Yg`Uj`U`Yb]f`cd`c`g`i`c`^`XY`U`i` b]j Yfg]hUhc3

GYbXYf`=a][`Yb`Zcfa Y`cd]U[Y`gY`VY`f`Ä`Z`Y`gY3
<]j U`U`cg`U`Y`b`U`h

ä i `j]`gYbXcgU`a]`Zcfa U`Ub`c`Zf`h`c`b`3

; U`Ub`h`Y`f`Y`i` b]j Yfg]hYhY]bX`_j U`h`Y`f`b]`3
Gn`1/2`1/ø

ä i `U`i` b]j Yfg]hUhc`[U`Ub`h]Uj[Uj][U`X`c`b`h`Y`3

4bX`Y`c`XY`f`ZU[Yh`c[g`A`Yb`d`f`U`_`h`_`d`Y`f]`c`XY3
; mU`_`c`f`b`c`_]`X` g`n`U`_`

ä i `U`_`i` f`g`c`]`b`_`i` n`U`j`g`h`U`c`b`h`Y`3

9f`XY`f`ca`_`c`g`b]b[Yf`j YX`U`h`g`h` XY`f`g`ca
i`Xj`Y`_`g]b[g`g`h` XY`f`Y`b`X`Y`d`A`XY`h`Y`i` b]j Yfg]hYhY3
5`bb`U`_`a`Y[Ä`f`XY`_` X`Ä`g`Y`Z`c[m`V`g`Y`f`Y`X]1/2`Ä`b`h`_`Y`!`Y`h`U`b`X`É`h`Z]n`Y`f`b]

ä i `Y`g`U`j`_`c`g`c`^`d`f`c`g`h`X]`_]`Y`]b`h`Y` U`b`U`g`h` XY`b`c`ä`Y`j`]U
i`b]j Yfg]hUhc3

<j cfX`Ub`_`Ub`Y`[Z`O`[Y`a]b`U`b`g`Q`b]b[g`Z`f`Ya [Ub] 3
5`bb`U`_`a`Y[Ä`f`XY`_` X`Ä`g`Y`Z`c[m`U`Y`Y`b`h`_`Y`n`Ä`g`b`m`æ`a` c`b`_`Q` Y`h`Y`h`!`Y`

?]Y`a]`d`c`j` U`j`_`c`b`f`c`]`U`d`f`c[f`Y`g`c`b`XY`a]U`U`d`]`_`c`3

<j UX`Yf`g`d`f`c`]`_`f`Uj YbY3
B`m`Y`j`h`i`X`1/2`g`U`_`U`b`U`g`c`U`r`c`g`_`Q` Y`h`Y`a` Ä`b`n`Y`_`Z`Y` `j` U`i` Ä`f`XY`_` X`Ä`g`

?]c`Y`g`U`j`U`]`b]j U`^`_`c`b`X]ä`c`^`Y`b`O]b]j`c`3

<j cfX`Ub`Y`f`SSSSSSSSSSSS`g`m`g`h`Ya`Y`h`3
¥`f`XY`_` X`Ä`g`U`f`Y`b`X`g`n`Y`f`f` `

?]c`Y`g`U`j`U`g]g`h`Ya`c`XY`SSSSSSSSSSSS`]`Y`3

g`h`X]Y`d`c]b`h
F`Y`b`X`g`n`Y`f`h`É`d`i`g`U`

XY`_`f`Y`X]h`c`

V`Y`X`O`a`a`Y`g`Y
F`Y`b`X`g`n`Y`f`h`É`d`i`g`U`

XY`b`c`h`c`

: Ä`f`Y`[`Y`b`U`_`U`X`Y`a]g`_`i`X`g`_`f]Z`h`g]X`g`h]`a`]h
i`Xj`Y`_`g]b[g`c`d`c`X`3
5`bb`U`_`a`Y[Ä`f`XY`n`Ä`g`Y`Z`c[m`Y`É`Y`h`i`X`c`a`Y`b`m`æ`g`Y`É]f`h`i`U`V`g`Y`f`Y`j` Ä[Ä`b`

ä i `a]`f`]W`j` U`j`U`_`U`X`Y`a]U`h`f`U`b`g`g`_`f]V`U`c`Z]b`Y`XY`a]U
U`b`ü`c`3

6Yj 1bXcf`1/ø HUi `1/ø



<j cfXUb`Yf`i bXYfj]gb]b[gZcfa Yb3
¥fXY_` XÅg`U`hUbÉ1/ø]`gÉi`gfí`

?]ca`YgUg`U`]bgfi`Ug]`c3

9f`XYf`SSSSSSSSSSSSSS`3
¥fXY_` XÅg`U`hUbÉ1/ø]`gÉi`gfí`

äi`YgUg`SSSSSSSSSSSSSS`3

ZcfY`Ågb]b[`Yf
`fU`hÉdi`gU

`Y`V]c^

gYa`]bUfYf
`fU`hÉdi`gU

gYa`]bUf]c^

i`bXYfj`]gb]b[
`fU`hÉdi`gU

`Yfb]`c^

_cbZYfYbWf
`fU`hÉdi`gU

_cbZYfYbW^

<j]`_Y`ZU[`h]`VmXYg`dÁ`gca`a`Yfg`c`Y3
B`mÉ]`Y[`mY`Ya`Y`_`1/2U`_Éb`1/2i`fni`gc`_`ZY`_`j`ÅfXY_` XÅg

?]cb`_i`fgc^`YgUgcZYfh]`HU^`Yb`gca`Yf`YfbY`c^3

<j`cfb`Áf`UZ`c`XYg`Y`gUa`]bYfbY3
J`]ng[`U]X`dcbhc`_

?]Ua`YgUg`U`Y`nUa`Ybc^3

<j`cf`_Ub`Y[`Z]bXY`]bZcfa`U]cb`ca`ZU[`YbY3
?`i`fni`gc`_`U`_`UbVgc`Urcg]bZcfa`1/2W`_`ÁfÅgY

?]Y`a`]`dcj`Ug]f`c`j`]bZcfa`c`b`df]`ä]i`^X]gdcbyW`U^
_i`fgc^3

9f`XYf`Yb`gdcfhg`U`dÁ`i`b]j`Yfg]hYhY3
Gdcfh`ÖndcbhZY`_`j`Uí`ÅfXY_` XÅg

äi`YgUgi`b]j`Yfg]hU`gdcfhY`c3

<j`cfXUb`_Ub`Y[`XY`hU[`Y]`gh`XYbhYfZcfYb]b[`Yf3
8]1/2Y[`mYgØ`YhY`_`Ynj`Uí`VgU`U`cn1/ø

?]Y`a`]`dcj`UgU]i]`gh`XYbhU`b`gcV]c^`b3

<j`UX`Yf`XYb`Ubg`ÁXY`Y`Y`Yca`_cg]b[`]`ÖmÖ3
5`j`1/2cgU`b]j`Uí`a`Y[`Á`Y`hÅg]`_`ÖhgÅ[`Y`_`ZY`_`j`Uí`ÅfXY_` XÅg

?]c`YgUg`U`U`hU`gU^j`j`UbHU^`_cg]c^`Yb`Ö`fVcÖ3

HUi `1/ø!`BmYj`hUbZc`ntla X1b

YgndYfUbh

6Yj 1bXcf`1q HUi `1q



< j] _Y'gdfc[_Ub'Y['gh XYfY'dA'g_c'Yb3
BmYj _i fni gc_ZY' `j U'i 'AfXY_` XAg

? [c`]b[j c'b'a]'dcj Ujgh X]Yb j]U`YfbY^c3

9f'XYf'Yb'd'UWf]b[ghYghZcf'UhVYXÖa a Y'a]h
bj] YU 3
Gn]bhZY'a Af' hYghZY' `j U'i 'AfXY_` XAg

ä i 'YghUghYgfc'dcf'fU_g]a]Ub'b]j Ycb3

? Ub'Y['g_]Zf'h'`YhUbXYhb]j YU `j]gXYb'Y[
XY'fU[Yf']]_Y'dUgYf'h'`a] [3
5 bbU_`a Y[_AfXYnAgZ`c[m'Y`YhG[Yg'Y'gn]bhYhj 1/2hU]

ä i 'a]'dcj UjZf]]U]Ub'b]j YcbžgY`Ui bi ž_Y'a]'äYghUž
bY'dfUj Ujdcf'a]3

< Uf'Xi `Yb'XYfU'YfYhVYg_f]j Y'gY'UZ'ZU[Yh3
6 j YW']bZcfa 1/2Yi' _AfAgY'UbnY'j hUbc`mUa fi`

ä i j] \Uj UjXYfU'Ub'df]g_f]Vcb'XY`U_i fgc3

< j UX'Yf'XYha U_g]a UY'UbU'XY'fU[YbXY'gh XYfYbXY
df''ZU[3
A U]a 1/2]gfAg]j Yj _'gn]a 1/2U_`a Y[_AfXYnAgY

? [c'YghUg`U'a U_g]a i a U'bca Vfc'XY`YfbUbc^Yb' _`Ugc3

< j] _Y'ZUW]hYf'Z]bXYg'XYf'dA'g_c'Yb3
5 n]g_c`U'1/2hU'bnÖ'fch`Y`Yh gA[Y_f `j U'i 'AfXY_` XAg

? [c]bgU'U c^YghUgYb j]U`YfbY^c3

5 ffU[YfYf' =c[gA'Y_g_i fg]cbYf3
?]f'Xi `1q_c_ZY' `j U'i 'AfXY_` XAg

ä i j] UfUbuUgY_g_i fgc^3

< j] _Y'dfc[fUa a Yf'h'VmXYg\Yf3
5 n]g_c`U'1/2hU'U'1/2chidfc[fUa c_ZY' `j U'i 'AfXY_` XAg

? [c'dfc[fUa c'b j]'dfcdcbUg3

HUi `1q! ^2 grÖbXÉU_

X1b

>Y[`Yf`Yf`Zcf'UhgdÖf[Y'h'`a i `][\XYfbY'Zcf
g]dYbX]Yf
:]bUbgñfc]1q] _ÖhgA[Y_ZY' `j U'i 'AfXY_` XAg

YgndYfUbñ

A]YghUg]h]Y'dcf'dYh'df]'Z]bUbWUXU^ UbVt^

< j] _Y'cf[Ub]gU]cbYf' _Ub'Z]bUbg]YfY'a]hgi X]i a 3
5 bbU_`a Y[_AfXYnAgZ'a Y'm]_gnYfj YnYfY_ Z]bUbgñfc]Uh1/2`U'hUbi `a 1/2mc_Uh

?]i b'_cfdc^dcj UjZ]bUbV]a]U'b'gi Xc'b3

>Y[`Uf'Vfi [`Zcf'Ö_cbca]g_`Ä'd'h'
SSSSSSSSSSSS"
5 bmU[]h]a c[Uh]1q_ÄfAgY

A]WrcbUgZ]bUbWb`Y'dcb'dcf' SSSSSSSSSSSSS"

6Yj 1bXcf`1g HUBi`1g



gi X]Y[YVmfYf

]bgfi XYdU[c^

8c`c[žLa]\Yn'UbntU[] h1a c[Uh1g'gn0_gA[Yg

`Yj Yca _cgfb]b[Yf

a]U^j]j YgdYnc^

8c`c[žLa]\Yn'UbntU[] h1a c[Uh1g'gn0_gA[Yg

VÔfbYdUgb]b[

]bZUbncf[UXc

8c`c[žLa]\Yn'UbntU[] h1a c[Uh1g'gn0_gA[Yg

< j] _Y'gU[g'ghdYbX]Yf'Yf'h' [Âb[Y][Y3

?]c'gdYVt^XY'ghdYbX]c^YgUg\Uj YV U^3

8c`c[žLa]\Yn'UbntU[] h1a c[Uh1g'gn0_gA[Yg

HUBi`1g! ? ØZØX]X]d`ca U'Åfj ÅbmYgĤÅgY

X1b

YgndYfUbĥ

>Y[j]' [YfbYj U]XYfY'a]hUZgi HhYbXY

A]' Uĥ gj U]X][]'a]Ub [fUXUb'fY[]gf]hcb'Yb'OUbXcQ

Y_gLa YbgVj]g]'OUbXQ

? ØZØX]X]d`ca UY Zc[UXhU1gU

< Uf`=Yb`]gh'cj Yf'Wfh]Z]WfYXY'cj YfgÂ HhYfY'Zcf

ä i j]\Uj Ug`]ghcb'XYWfh][]hU^hfUXi _]ghc^Yb'O]b[j cQ

Qgdfc[Q

<]h'YgZcfXĤĥ _'ZY` `j Uĥ' ÅfXY_` XÅg

< j cf`_Ub`Y['ZÁ'YhÂ_j]j UYbgWfh]Z]_U3

?]Y'a]'dcj UgU_]f]'fY[]gf]hcb'XY_Y_j]j UYbhWt3

5 bbU_`a Y[ÅfXY_` XÅgž`c`Y\Yh][]hU`1gU`U`U`Y`ga YfhX]d`ca 1ĥ`