

i [YbX`]WXY']b]h]]YfYb'9]bVfi WX']b'K]YbYf FYghUi fUbh' : YghbU\a Y'bUWX': `i WXh°

Nk Y]' i [YbX`]WXY'k i fXYb']b'6f][]hhYbUi 'bUWX'Y]bYa j Yfgi WX hYb'9]bVfi WX']b'Y]b'FYghUi fUbh'ZYgh[Ybca a Yb" 9fa]hh`i b[Yb'`Ui ZYb"



6f][]hhYbUi ž'² ghYffY]WX '! 'BÀWX h`]WX Y '5i ZfY[i b[']b'K]Yb. '\
BUWX h'Ui Z'A]hhk cWX 'gYhnh'XUg'HYUa 'XYf'Dc`]nY]]bgdY_h]cb
DUddYb\Y]a [UggY'ni f'\>U[X'Ui Z'nk Y]'* [YbX`]WXY'Ub"'8]Y'VY]XYbž
Y]b'%*!'À\f][Yf'Gca U`]Yf'i bX'Y]b'%, !'À\f][Yf'² ghYffY]WXYfž'ghY\Yb
]a 'JYfXUWX hž']b'Y]b'FYghUi fUbh'Y]b[YVfcWXYb'ni 'gY]b"'@Ui h'
\Yi hY"Uh'\UVYb'X]Y'VY]XYb''A b[Yb'A ÀbbYf'X]Y'; `UghØf'XYg
@c_U`g'Y]b[YgWX`U[Yb'i bX'g]WX 'gc'Ni [Ub['ni 'XYb'FÀi a `]WX_Y]hYb
j YfgWX UZZh"

6Y] '9]bhfYZZY b 'XYf 'Dc`]nY] 'k UfYb 'X]Y 'VY]XY b 'HUhj YfXÀW\h][Yb YXcW\ 'VYfY]hg 'Ui Z'XYf': `i W\h" '8 Ub_'Y]bYf 'i a [Y\YbXYb GcZcfhZU\bXi b['[Y`Ub['Yg'XYb'9]bgUhn_fÀZhYbž'g]Y 'fUgW\ 'ni gW\bUddYb" 'K À\fYbX'X]Y '[YbUi Yb'I a ghÀbXY'XYf'HUh'bcW\

i b_`Uf`g]bXž`ghY\h`Ui » Yf`: fU[Yž`XUgg`X]Y`9fa]hh`i b[Ybž`X]Y`j ca @UbXYg_f]a]bU`Ua h`K]Ybž`5i » YbghY``Y`K Yghž`[YZØ\fh`k YfXYbž j cffUb[]['Ui WX`_`ÀfYb`a ØggYbž`cV`hUhgÀWX`]WX`Y]b`8]YVghU\`ghUhh[YZi bXYb`\Uh"

K Yf ghY W_h \]bhYf XYa '9]bVfi W 3

8]Y`VY]XYb`ZYgh[Ybca a YbYb`¾ [YbX`]WXYb`g]bX`nk Uf
i bhYfgWX]YX`]WX`U`hž`UVYf`VY]XY`\UVYb`Y]bYb`_f]a]bY``Yb
5i gfY]» Yf`\]b[Y`Y[hž`XYf`Y]bY`K Y``Y`XYf`6Ygcf[b]g`]b`XYf
BUWXVUfgWXUZh`Ui g[Y`Ògh`\Uh"`8Yf`%*!¾\f][Yž`Y]b`gca U`]gWXYf
GhUUhgVØf[Yfž`i bX`gY]b`%,!^À\f][Yf`ÒghYffY]WX]gWXYf`?ca d`]nY
\UVYb`g]WX`a]h`]\fYa `bÀWXh`]WXYb`5VYbhYi Yf`_Y]bY`6`ØhYb
j YfX]Ybh"`BUWX`YfghYb`6Yf]WXhYb`k Uf`X]Y`9]bgUhnfYU_h]cb`XYf
Dc`]nY]`dfca dh`i bX`YZZY_h]j ž`k Ug`X]Y`6Øf[Yf`ZØf`]\fY`G]WXYf\Y]h
\cZZYb``Aggh"`8]Y`8YhU]`g`g]bX`]b`Y]bYf`k Y]hYfYb`6Yf]WXhYfghUhhi b[Ui Z'j]YbbU"Uh`ZYgh[Y\U`hYb"

9g'V`Y]Vh'UVni k UfhYbž'k]Y'g]W\X]Y'fYW\h`]W\Yb'?cbgYei YbnYb'ZØf X]Y'VY]XYb'¾ [YbX`]W\Yb'Ybhk]W_Y`b"'8]Y'9fa]hh`i b[Yb'XYf ?f]a]bU`VYUa hYb'g]bX'VYfY]hg']a '; Ub[Y'i bX'k YfXYb'@]W\h']bg 8i b_Y``Vf]b[Ybž'i a 'XYb'JcfZU``i a ZUggYbX'Ui Zni_`ÀfYb"

9]b'_i fnYg'BUW\XYb_Yb'ØVYf'X]Y'`YhnhYb'9fY][b]ggY'nY][hž'XUgg'Yg]a a Yf'[i h']ghž'Ui Z'X]Y'Y][YbY'BUW\VUfgW\UZh'ni 'UW\hYb"'8Ybb a UbW\a U``a i gg'a Ub'b]W\h'`Ub[Y'gi W\Ybž'i a 'ni 'gY\Ybž'k Ug'j cf XYf'Y][YbYb'<Ui ghØf'dUgg]Yfh"'5i W\'k Ybb'X]Y'HU_h]_'XYf \(\frac{1}{2}\) [YbX`]W\Yb'b]W\h'Ui Z[Y[Ub[Yb']ghž'V`Y]Vh'X]Y': fU[Yž'k Ug'UbXYfY]b'\A\b`]W\Yb'G]hi Uh]cbYb'XUni 'VYk Y[hž'[YfUXY'X]YgYb'DZUX'ni k\A\`Yb"

8 YhU]`g	
Cfh	6f][]hhYbUiž ² ghYffY]WX
EiY``Yb	• k k k "\ Yi hY "Uh
	• k k k "j]YbbU"Uh

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'a Y]b!k]Yb "bYh