

DfYi » Yb `A ØbghYf `[Y[Yb `%" : 7 ? U]gYfg`Ui hYfb. `Gc `gY\h']\f `XUg `Gd]Y` `]j Y°

9fZU\fYb'G]Yžk c'i bX'k]Y'G]Y'X]Y'&"'6i bXYg`][U'Gd]Y`Yž Y]bgW\`]Y»`]W\'DfYi »Yb'A ØbghYf'[Y[Yb'?U]gYfg`Ui hYfbž'`]j Y j YfZc`[Yb'_ObbYb"

± XYf'U_hi Y``Yb': i » VU``gnYbY'gcf[h'XUg'5i ZY]bUbXYfhfYZZYb
nk]gWXYb'DfYi » Yb'A ØbghYf'i bX'XYa '%": 7'?U]gYfg`Ui hYfb'ZØf
5i ZfY[i b["'8]YgY'6Y[Y[bi b[']b'XYf'&"'6i bXYg`][U'n]Y\h'X]Y
5i Za Yf_gUa _Y]h'j]Y`Yf': Ubg'Ui Z'g]WX Ž'XcWX'k]Y'_Ubb'a Ub'XUg
Gd]Y```]j Y'j YfZc`[Yb3'9g'[]Vh'Y]b][Y'k]WXh][Y'±bZcfa Uh]cbYb'ZØf'U``
X]Y Yb][YbŽ'X]Y'Ua '\Yi h][Yb'HU['_Y]b'Gd]Y``j YfdUggYb'a ÒWXhYb"

I a 'XUg'A UhW\nk]gW\Yb'XYb'VY]XYb'HYUa g'`]j Y'ni 'Yf`YVYbž']gh'Yg i bYf`Àgg`]W\žY]b'5VcbbYa Ybh'ni '\UVYb"'8Ug'VYXYi hYhž'XUgg : Ubg'g]W\'Ui Z'Y]bY'gdYn]Y``Y'D`UhhZcfa 'VY[YVYb'a ØggYbž'i a 'XUg ; YgW\Y\Yb'Ui Z'XYa 'D`Uhn'ni 'j YfZc`[Yb"'8]Y'9a dZY\`i b['ZØf Y]bYb'GhfYUa '`Ui hYh.'K CK "'8]YgY'D`UhhZcfa '\Uh'g]W\'U`g'Y]bY'XYf VYghYb'A Ò[`]W_Y]hYb'YhUV`]Yfhž'i a '6i bXYg`][U!Gd]Y`Y']b'9W\hnY]h ni '[Yb]Y»Yb"'8]Yg']gh'VYgcbXYfg'k]W\h][ž'XYbb'j]Y`Y'Ni gW\Ui Yf a ÒW\hYb']b'XYf'\Yi h][Yb'X][]hU`Yb'K Y`hVYei Ya 'i bX'c\bY JYfnÒ[Yfi b[Yb'Ui Z']\fY'@]YV`]b[ggdcfhUfhYb'ni [fY]ZYb"

HJ!, VYfhfU[i b[..K c'_Ubb'a Ub'XUg'Gd]Y`gY\Yb3

: Øf'X]Y': Ubgž'X]Y'g]W\``]YVYf'Ui Z'XUg'hfUX]h]cbY``Y': YfbgY\Yb
j Yf`UggYbž']gh'X]Y'G]hi Uh]cb'Yhk Ug'UbXYfg"'8Yf'G_mlE!FYWY]j Yf']gh
X]Y'YbhgW\Y]XYbXY'< UfXk UfYž'i a 'XUg'Gd]Y``]a '`]bYUfYb
: YfbgY\Yb'ni 'Ya dZUb[Yb"'8Ua]h'Yf\U`hYb'X]Y'Ni gW\Ui Yf'a Y\f</pre>

 $\begin{tabular}{ll} U`g`bi f`X]Y`A O`[`]WX_Y]hž`XUg`Gd]Y``ni `gY\Yb/g]Y`_O`bbYb`Ui WX?ca a YbhUfY`i bX`5bU`mgYb`]b`9WXhnY]h`[Yb]Y`*Ybž`X]Y`cZh`XUg Gd]Y`Yf`YVb]g`VYfY]WXYfb"`5b`Y]bYa `HU[ž`Ub`XYa :: i **VU```]a A]hhY`di b_h`ghY\hž`]gh`Yg`k]WXh][`ni `k]ggYbž`k c`i bX`k]Y`a Ub`X]Y VYghYb`<math>\pm$ DCfa Uh]cbYb`i bX`X]Y``YV\UZhYghY`6Yf]WXhYfghUhhi b[Yf\A`h"

8]Y; Ø`h][_Y]h'j cb'5VcbbYa Ybhg'i bX'GhfYUa]b[!8]YbghYb'_Ubb g]W\'YxcW\'gW\bY```ÀbXYfbž'k cXi fW\'Yg'ZØf': Ubg'\YfUi gZcfXYfbX gY]b'_Ubbž'X]Y'dUggYbXYb'Cdh]cbYb'ni 'Z]bXYb"'8U\Yf']gh'Yg fUhgUa ž'g]W\'j cf'XYa 'Gd]Y``ØVYf'X]Y'U_hi Y``ghYb , VYfhfU[i b[ga Ò[`]W_Y]hYb'ni ']bZcfa]YfYb"'8Ug'Gd]Y``nk]gW\Yb DfYi »Yb'A ØbghYf'i bX'XYa '%": 7'?U]gYfg`Ui hYfb']gh'b]W\h'bi f'Y]b k Y]hYfYg'?Ud]hY`']b'XYf'&"'6i bXYg`][Už'gcbXYfb'_ObbhY'Ui W\YbhgW\Y]XYbX'ZØf'X]Y'D`Uhn]Yfi b['XYf'HYUa g']b'XYf'HUVY``Y k YfXYb"

- Gd]Y`. DfYi » Yb A ØbghYf j g" %": 7 ? U]gYfg`Ui hYfb
- K YhhVYk YfV. & "6ibXYg`][U
- GhfYUa]b[!D`UhhZcfa . K CK
- : YfbgY\Yb. G_mE!FYWW]j YfYfZcfXYf`]WX

8]Y'&"'6i bXYg`][U'\Uh'g]W\']b'XYb'`YhnhYb'\\J\fYb'U`g'Ài » Yfgh XmbUa]gW\'i bX'i bVYfYW\YbVUf'Yfk]YgYb"'8Ug'8i Y``nk]gW\Yb A ØbghYf'i bX'?U]gYfg`Ui hYfb'ghY\h'gma Vc`]gW\'ZØf'X]Y Ui ZfY[YbXYb'K YhhVYk YfVY']b'X]YgYf'@][U"'\XXYf'Di b_h'nÀ\`hž'i bX [YfUXY'gc`W\Y'Gd]Y`Y'_\ObbYb'XYb'k Y]hYfYb'J Yf`Ui Z'XYf'GU]gcb Yf\YV`]W\'VYY]bZi ggYb"'Gck c\``DfYi » Yb'A ØbghYf'U`g'Ui W\'XYf'%" : 7'?U]gYfg`Ui hYfb'\UVYb'hfYi Y'5b\\Ab[Yfž'X]Y'a]h'@Y]XYbgW\UZh\]bhYf']\fYb'HYUa g'ghY\Yb"

8]Y'j YfgWX]YXYbYb'Cdh]cbYb'ni f', VYfhfU[ib['X]YgYf'Gd]Y'Y j YfXYih`]WXYbž'k]Y'k]WXh]['Yg']ghž'Ni[f]ZZ'UiZ'X]Y'YbhgdfYWXYbXYbD`UhhZcfaYb'ni'\UVYbž'ia'b]WXhg'ni'j YfdUggYb"'CV'XifWXGhfYUa]b['cXYf':YfbgY\Ybž'X]Y'\Yih][Y'6Y[Y[bib['k]fXq]WXYf`]WX'j]Y'Y'9ach]cbYb'\YfjcffiZYb"

VYf'XUg'Gd]Y`.'K Ug'ghY\h'Ui Z'XYa 'Gd]Y`3

: Øf'VY]XY'HYUa g']gh'XYf'5i g[Ub['X]YgYf'DUfh]Y'Ybcfa 'k]W\h]["
8]Y': Ubg'\cZZYb'Ui Z'Y]bY'gdUbbYbXY'6Y[Y[bi b[ž'X]Y
a Ò[`]W\Yfk Y]gY'Ui W\'ØVYf'XUg'fY]bY'Gd]Y``\]bUi g'ZØf
; Ygdf\W\gghcZZ'gcf[Yb'k]fX"'8i fW\'X]Y'U_hi Y``Y'?cb_i ffYbn']b
XYf'&"'6i bXYg`][U'ghY\Yb'X]Y'Gd]Y`Yf'i bhYf'8fi W_ž'XU'g]Y'g]W\
VYk Y]gYb'a ÒW\hYb"'\XXYg'Hcf'i bX'\YXY'JYfhY]X][i b[gU_h]cb'k]fX
Y]b[Y\YbX'VYcVUW\hYh'i bX'_Ubb'k Y]hfY]W\YbXY': c`[Yb'ZØf'X]Y
A UbbgW\UZhYb'\UVYb"

I a 'Ui Z'XYa '@Ui ZYbXYb'ni 'V'Y]VYbž']gh'Yg'ZØf': Ubg'i bYf'Àgg`]W\ž
]\fY'C dh]cbYb'ZØf'X]Y'Gd]Y`YfØVYfhfU[i b[Yb'[i h'ni '_YbbYb"
< YffgW\h'I bg]W\Yf\Y]h'ØVYf'5VcbbYa Ybhg3'=gh'XUg'GhfYUa]b[
ghUV]`'[Ybi [3'Gc`W\Y': fU[Yb'Xca]b]YfYb'\Yi hni hU[Y'X]Y
; YXUb_Yb'XYf'Ni gW\Ui Yfž'j cf'U``Ya ž'k Ybb'Yg'i a 'Y]b'gc
k]W\h][Yg'Gd]Y`'[Y\h''I bUV\\Ab[]['j cb'XYf', VYfhfU[i b[gZcfa
gc``hYb'X]Y': Ubg'ghYhg'XUfUi Z'UW\hYbž'XUgg'g]Y'U``Y'YfZcfXYf`]W\Yb
+DZcfa Uh]cbYb'dUfUh'\UVYb"

 $\pm 0.7XYf.gWX.bY.^*YV][Yb.K.Y.^hXYg.:i.wVU.^*g.^]gh.Yg.Yb.hgWX.Y]XYbXž.g]WXX]Y.^VYghYb.^C.dh]c.bYb.^ZØf.^XUg.^Ni.gWX.Ui.YfYf.^YVb.]g.^ni.^g]WX.Yfb.''.8U.^Yf.]gh.Yg.^Ub.^XYf.^NY]hz.^X]Y.^VYghYb.^D.^UhhZc.fa.Yb.^ni.^Z]b.XYb.'i.bX.^VYfY]h.^ni.gY]b.zk.Ybb.^XYf.^5bd.Z]ZZ.^Yfh\dotabh.''.Gc.^ghY\h.Y]bYa.^i.bj.Yf[Ygg.^]WX.Yb.:i.w.VU.^*UVYbX.'b]WX.hg.'a.Y.^f.]a.^K.Y[Y".$

VYfhfU[ib[ibX'AYX]YbfYWXhY']b'XYf'&" 6ibXYg`][U

 $8] Y ", VYfhfU[i b[gfYWk hY "XYf" \&""6 i b XYg"][U "g]b X "Y]b "j] Y ` X]g_i h]YfhYg"H\Ya U"" \div 8 Yi hgWk "Ub X "g]b X "X]Y "A YX]YbfYWk hY "Ub XYb "Gd]Y "Yb "ghUf_"fY[i "]Yfh"i b X "k YfXYb"]b "XYf"F Y[Y""Ub"[fc " Y GYb XYf"j Yf[YVYb z"X]Y "gc k c \" "]a ": fYY!HJ "U "g"Ui Wk "]a "DUm!HJ U_h]j "g]b X" "5_hi Y"" \ Uh"XYf"GhfYUa]b[X]Ybgh"K C K "fY\Ya U "g"G_m H]W_Yhk"X]Y "F YWk hY z"i a "Y]b][Y "Gd]Y "Y""]j Y "ni "ØVYfhfU[Yb""Ni XYa nY][h"G_m"]b "gY]bYa "DUm!HJ!5b[YVch"fY[i "ÀfY"Gd]Y"Y""8]YgY Ghfi _hi f"\Uh"XUni "[YZØ\fhz"XUgg": i "VU""ZUbg"bUWk "J Uf]UbhYb gi Wk Yb z"i a "Gd]Y "Y"ni "gY\Yb z"XU"b]Wk h"U""Y "6Y[Y[bi b[Yb"]a ": fYY!HJ "ØVYfhfU[Yb"k YfXYb"$

 $8]Y'JYfhY]`ib[`XYf`AYX]YbfYW\hY`hfÅ[h'UiW\nifDcdi`Uf]hÅh'jcbY]bYb'YbYb'HYUag'VY]"JYfY]bYž'X]Y'\ÀiZ][`]a`:YfbgY\Yb'ni`gY\Ybg]bXž'Yf\U`hYb'gc'Y]bY'Yf\Ò\hY`OZZYbh`]W\Y`KU\fbY\aib[`ibX__\ObbhYb'gca]h'UiW\'jcb'Y]bYa`5bgh]Y[`VY]'H]_YhjYf_\AiZYb'ibXAYfW\UbX]gY'dfcZ]h]YfYb''NiXYa`X]g_ih]YfYb'j]Y`Y':Ubg'X]Y':fU[YXYf'HfUbgdUfYbn'VY]'XYb',VYfhfU[ib[gfYW\hYb'ibX'XYb'Ni[Ub[ni`8]Ybgh`Y]ghib[Ybž'X]Y'ZØf'U``Y':Ubg'[`Y]W\YfaU\\Yb'ni[\Ab[`]W\gY]b'gc``hYb''$

5_hi Y``Y'9bhk]W_`i b[Yb']b'XYf'&"'6i bXYg`][U

8]Y'&"'6i bXYg`][U'\Uh']b'XYf'U_hi Y``Yb'GU]gcb'Y]b][Y']bhYfYggUbhY 9bhk]W_`i b[Yb'Xi fW\`Ui ZYb"'\dgVYgcbXYfY'_cb_i ff]YfYb'Y]b][Y HfUX]h]cbgj YfY]bY'i a 'XYb'5i Zgh]Y[']b'X]Y'6i bXYg`][U" A UbbgW\UZhYb'k]Y'XYf'\%": 7'?U]gYfg`Ui hYfb'\UVYb'Y]bY'`Ub[Y'\YgW\]W\hY'i bX'j Yfgi W\Ybž']\fY'Dcg]h]cb']a 'XYi hgW\Yb':i »VU``k]YXYf'ni 'ZYgh][Yb"'8Yf'K YhhVYk YfV']gh']b'X]YgYf'GU]gcb VYgcbXYfg'gdUbbYbXž'XU'a Y\fYfY'?`i Vg'bi f'k Yb][Y'Di b_hY Ui gY]bUbXYf`]Y[Ybž'k Ug'ni 'Y]bYa '\cW\]bhYbg]j Yb'i bX i bj cf\YfgY\VUfYb'GU]gcbj Yf`Ui Z'ZØ\fh"

8 UfØVYf`\]bUi g`\Uh'XUg`H\Ya U`XYf`: Ub]bhYfU_h]cb`Ub`6YXYi hi b[[Yk cbbYb"'8]Y`JYfY]bY`gYhnYb`ni bY\a YbX`Ui Z`gcn]U`Y`A YX]Ybž i a `X]Y`JYfV]bXi b[`ni `]\fYb`5b\Àb[Yfb`ni `ghÀf_Yb"`K À\fYbX`XYf Gd]Y`Y`Z]bXYb`g]W\`cZh`nU\`fY]W\Y`Hk YYhg`i bX`Dcghg`XYf`: Ubgž`X]Y]\fY`A Y]bi b[Yb`i bX`FYU_h]cbYb`]b`9W\hnY]h`hY]`Yb"`8]Yg`\Uh`b]W\h bi f`X]Y`: Ub!?i `hi f`[YdfÀ[hž`gcbXYfb`Ui W\`X]Y`5fh`i bX`K Y]gY j YfÀbXYfhž`k]Y`Gd]Y`Y`k U\f[Ybca a Yb`k YfXYb"

8 Y hU]`a

6Ygi WXYb G]Y i bg Ui Z b!U["XY