

6]bUbWY _ØbX][hjcfØVYf[Y\YbXY 5iggYhnib[jcblG8! 6Ub_ØVYfkY]gib[YbUb

6]bUbWY X]Y k Y hk Y]h [fo) hY ?fmdhc!6OfgY [UV Ua A cbhU['VY_Ubbhž XUgg g]Y UV XYa , ": YVfi Uf U`Y '9]b! i bX 5i gnU\`i b[Yb]b I G8 j cb 6Ub__cbhYb dUi g]YfYb k]fX" 8 Ug I bhYfbY\a Yb gU[hYž Yg k YfXY XUfUb 'UfVY]hYbž X]Y : i b_h]cb gc gW bY ``k]Y a O[`]W\ bYi 'ni 'ghUfhYb" K Ufi a 'X]Y Gi gdYbX]Yfi b[3'B UW\ 'Ub_ØbX][Yb 8]Y Gi gdYbX]Yfi b['ØVYf Hk]hhYf Vch 6]bUbW '_Y]bY VYgcbXYfY '9f_`Afi b['XUZØfž k Ufi a 'g]Y 'ghUhhZUbX" '9g 'ghY ``hY 'YXcW\ '_YUfž XUgg X]Y DUi gY bi f'Y]bYb'_`Y]bYb 'HY] ''gY]bYf 6Ybi hnYfVUg]g 'VYhfYZZYb k ØfXY" 5``Y 'UbXYfYb'A Yh\cXYb'ni a '? Ui Z'i bX 'J Yf_Ui Z'j cb ?fmd hc 'Ub 'XYf 6OfgY 'V`Y]VYb 'VYghY\Yb 'Y]bgW\`]Y » `]W\ ?fYX]h_UfhYbž 5dd `Y 'DUmž'; cc[`Y 'DUmi bX 6Ub_ØVYfk Y]qi b[Yb'a]h/ Ua d\Y`]d/

6]bUbWY: X]Y'k Y`hk Y]h'[fÒ» hY'?fmdhc!6ÒfgY: '[UV'Ua 'AcbhU[VY_Ubbhž'XUgg'g]Y'UV'XYa', ": YVfi Uf'U``Y'9]b!'i bX'5i gnU\`i b[Yb]b'l G8'j cb'6Ub__cbhYb'dUi g]YfYb'k]fX"'

8 Ugʻl bhYfbY\a YbʻgU[hYžʻYgʻk YfXYʻXUfUbʻUfVY]hYbžʻX]Yʻ: i b_h]cb gcʻgW\bY```k]Yʻa Ò[`]W\bYi 'ni 'ghUfhYb"

K Ufi a X]Y Gi gdYbX]Yfi b[3

BUWW 'Ub_ØbX][Yb '8]Y 'Gi gdYbX]Yfi b['ØVYf'Hk]hhYf'Vch'6]bUbWW _Y]bY 'VYgcbXYfY '9f_`Àfi b['XUZØfž'k Ufi a 'g]Y 'ghUhhZUbX" '9g'ghY``hY YXcWX'_`Ufž'XUgg'X]Y 'DUi gY 'bi f'Y]bYb'_`Y]bYb'HY]`'gY]bYf 6Ybi hnYfVUg]g'VYhfYZZYb'k ØfXY"'

5``Y`UbXYfYb`A Yh\cXYb`ni a `?Ui Zi bX`JYf_Ui Zj cb`?fmdhc`Ub`XYf 6ÒfgY`V`Y]VYb`VYghY\Yb` `Y]bgW\`]Y»`]W\`?fYX]h_UfhYbž'5dd`Y`DUmž; cc[`Y`DUmi bX`6Ub_ØVYfk Y]gi b[Yb`a]h`UbXYfYb`:]Uh! K À\fi b[Yb`k]Y`9i fc"

9gʻ]ghʻYfk À\bYbgk YfhžʻXUggʻbi fʻ\$ž\$%ʻi ʻi bgYfYfʻa cbUh`]W\U_h]j Ybʻ6Ybi hnYfʻI G8!6Ub_ØVYfk Y]gi b[Ybʻbi hnYbžʻUVYfʻXUggʻk]f\UfhʻXUfUbʻUfVY]hYbžʻXYbʻ8]YbghʻgcʻgW\bY```k]Yʻa Ò[`]W\k]YXYfUi Zni bY\a Yb žʻgU[hYʻY]bʻGdfYW\Yfʻj cbʻ6]bUbWYʻ6`cca VYf[``]bYfʻ9!A U]`"

8]Y 'D`ÀbY 'VYhfY ZZYb 'Ui W\ 'b]W\ h'X]Y '?i bXYb 'j cb '6]bUbW\"I G` 'X]Y Y]bn][Y:]fa U'nk]gW\ Yb 'XYb 'VY]XYb 'a]h'XYf '9f`Ui Vb]gž'6Ybi hnYf]b'XYb'J YfY]b][hYb'GhUUhYb'ni 'VYX]YbYb"' K]f'gYhnYb'` I G8! $5V\YVi$ b[Yb'i bX'!9]bnU\`i b[Yb'Ua', "::YVfi Uf'B=7< H'Ui g ž hk]hhYfhY'XUg'I bhYfbY\a Yb'Ua' A cbhU["

8 Yf'Ni gUa a YbVfi W\'j cb': HLž'XYa 'Y]bgh'[fÒ» hYb]bhYfbUh]cbU`Yb'F]j U`Yb'j cb'6]bUbW\ž'\Uh'XUni '[YZØ\fhž'XUgg'X]Y6Ub_Yb'nÒ[Yfbž'DUfhbYfgW\UZhYb'a]h'?fmdhcZ]fa Yb'Y]bni [Y\YbžbUW\XYa 'X]Y'6i bXYgVY\ÒfXYb'j cf'gc`W\Yb'DUfhbYfgW\UZhYb[Yk Ufbh'\UhhYb"

 $\label{eq:continuous} K \ \mbox{A} \ \mbox{fyb} \ \mbox{Y} \ \mbox{b} \ \mbox{C} \ \mbox{M} \ \mbox{C} \ \mbox{M} \ \mbox{C} \ \mbox{M} \mbox{M} \ \mbox$

7 N ZØ[hY \]bni ž'XUgg'X]Y DUi gY VY] I G8!6Ub_ØVYfk Y]gi b[Ybhfchn]\fYfa]b]a U`Yb 5i gk]f_i b[Yb Ui Z'X]Y ?i bXYb]a a YfbcWXY]bY gWX YWXhY 6Ybi hnYfYfZU\fi b['gY]"

G][bUhifVUb_

=a '>Jbi Uf'_ØbX][hY'6]bUbW'Ubž'XUgg'Y]bYf'gY]bYf'6Ub_dUfhbYfž X]Y'G][bUhi fY'6Ub_ž'X]Yg'hi b'k ØfXY'JYfUfVY]hi b['ghcddYb'':]Uhl ni!?fmdhc!HfUbgU_h]cbYb']a 'K Yfh'j cb'k Yb][Yf'U'g'%\$\$"\$\$\$'`"'8Yf ?fYX]h[YVYf'VYUVg]Wkh][hž'gY]b'9b[U[Ya Ybh']b'?fmdhca Àf_hYb'ni $\label{eq:continuous} $$ Yff]b[Yfb'ibX'9]b'V[Yb'jcb'']$ fmdhc_ibXYb']b'<OVY'jcb'V]g'ni%$`A]``]UfXYb'IG!8c``Uf'ni'_ØfnYb'''$

8 Yf'l a ni ['YfZc`[hY'U`g'FYU_h]cb'Ui Z'U'GhY``i b[bU\a Y''j cb'XYf : YXYfU`'8 Ydcg]h' =bgi fUbWY'7 cfdcfUh]cbž'XUgg'6Ub_]b[']a '?fmdhc! GY_hcf'U`g'f]g]_cfY]WXY'5_h]j]hÀh'Ub[YgY\Yb'k YfXYb'gc``hY'''

 $\ell > 0$

8 Y hU]`c

6Ygi WXYb G]Y i bg Ui Z _fmdhc!bYk g"Uh