

HUMS2000

 $5 fhg^{-} \pm hY fbg \]d$

HYfa "Hk c" ## "&\$&\$

7 ci fgY Cj Yfj]Yk

GHJZZ:7cbHJWh:8YHJ]`g

7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`]hm	@cWUh]cb	D\cbY
@ci]gY⁻GhiXXm	`"ghi XXm4 i bgk "YXi "Ui	9a U]`Zcf Uddc]bha Ybh	F cca '%*) '!, ž]fghZccfž A cfj Yb 6fck b 6i]`X]b[

GWXcc`7cbHJWh′±bZcfa Uh]cb

GWkcc``cZGcWJU``GWJYbWYg

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A cfj Yb 6fck b 7 &\$

Ya U]`. 'gcgg4 i bgk "YXi "Ui

d\cbY. '\$&'-',) '% \$+

7ci fgY 8YHJ] g

7 fYX]hDc]bhg * *

Gi a a UfmcZh\Y 7ci fgY

Gi VYWh5fYU. 3dfe

 $H\ [g'WcifgY'WUb'U'gc'VY'ghiX]YX']b'h\ Y'Zc``ck\ [b['gdYW]U']gUh]cbg. \ 5d_['a'aYkl? WW[S/? WW[S B da Vg Uf[a`fl? WW[S/E Udww S`V E ag`Vfl? WW[S/5a_e `e` < agd`S'[e_fl? WW[S/BgT']U DWSf[a`e S`V 3VhWdf[e['Yfive B da Vg Uf[a`fl? WW[S/BgT']U DWSf[a`e S`V 3VhWdf[e['Yfiv B da Vg Uf[a`fl]]U DWSf[a`e S`V 3VhWdf[e['Yfiv B da Vg Uf[a`e S`V S`V AVhWdf[e]']U DWSf[a`e S`V 3VhWdf[e]']U DWSf[a`$

H\Y`<I A G&\$\$\$`Wci fgY`]g`Ub`Y`YWfj Y`]b`h\Y`I BGK `5ffg`UbX`GcWJU``GWJYbWrg`dfc[fUa g`UbX`h\Y 7f]a]bc`c[ma U^cf`]b`h\Y`6UW\Y`cf`cZDgmW\c`c[]\W\``GWJYbWrg`dfc[fUa "`#ia UmVY`HU_Yb`Uhih\Y`YbX`cZU ZfghmYUf`cZghi XmUbX`cZZYfg`ghi XYbhg`k cf_`YI dYf]YbWr`]b`U`fUb[Y`cZcf[Ub]gUh]cbg`i hj`]g]b[`gcWJU`fYgYUfW\`UbX`dc`]\whiUbX`\i a Ub]hYq`q_]``q"

H\Y'j cWUMcbU``d`UWYa Ybhžk\]W\`]g`k cf_YX`]b`h\Y`GmXbYma Yhfcdc`]hUb`UfYUždfcj]XYg`k cf_'YI dYf]YbWY UhU`\cghcf[Ub]gUMcb`Zcf`%('Z ```XUmg`f%\$) `k cf_]b[`\ci fgŁ"'H\]g`dfUW]\W\``YI dYf]YbWY`]g`UWWca dUb]YX`Vm U`fYUX]b[`dfc[fUa "'H\Y`fYUX]b[`Wca dcbYbhYI Ua]bYg`X]ZZYfYbhUddfcUW\Yg`hc`h\Y`gh XmcZcf[Ub]gUMcbgž h\Y]f`ghfi Whi fYgž`Z bWJcbg`UbX`dc`]\JYgž'Ug`k Y```Ug``]b_g`h\YgY`]ggi Yg`hc`h\Y`d`UWYa YbhYI dYf]YbWY"

BchY. 'Ghi XYbhg'a i gh\Uj Y'UW\]Yj YX'U'WfYX]h'Yj Y'`cf'VYhHYf'Uj YfU[Y'UWfcgg'h\Y'Wti fgYg']b'h\Y]f'XY[fYY'' H\Y']bhYfbg\]d'a UmVY']bWi XYX'Ug'dUfhcZU'a U'cf']b'h\Y': UW `hmdfc[fUa g'k]h\'h\Y'dYfa]gg]cb'cZh\Y fY`Yj Ubh'7 cbj Ybcf''

: cf'XYHJ]g'cb'\ck 'hc'Udd`md`YUgY'WcbHJWh\Y': UW'\hmK $cf_'=bhY[fUhYX'@YUfb]b['I b]h.': <math>\underline{5GGI}$ K =4 i bqk "YXi "Ui "

7ci fgY @YUfb]b[Ci hWca Yg

- %" ±j Ygh][UHY 'h\Y 'XmbUa]\Wg'cZk cf_]b['k]h\]b'Ub'cf[Ub]gUh]cb'k \Yh\Yf'df]j UHYž'di V`]\Wcf'bchZcf'dfcZ|h fB: DŁ
- &" DUffjWduhY]b Ub UWfjcb fYgYufW dfc YWrcf Hu_Y fYgdcbg]V]]mrZcf Vi g]bYgg fY UhYX Hug_g
- ' " 5 ft]W `UtY `Ub`]b`XYdt\ i bXYfgtUbX]b[`cZgYj YfU``_YmUgdYWtg`cZcf[Ub]gUt]cbU``t\Ycfmik]t\ `WYUf `]b_g`tc`t\Y`\cgtiUbX`]btYfbg\]d`tUg_g#dfc^YWt
- ("9IdYf]YbWY'h\Y'dUWY'UbX'df]cf]h]Yg'cZU'dfcZYgg]cbU``k cf_'Ybj]fcba Ybh'UbX']XYbh]ZmUbX'XYj Y`cd gca Y'cZh\Y'g_]``g'UbX'_bck `YX[Y'bYYXYX'hc'[U]b'Ya d`cma Ybh

HYUWX]b[GhfUhY[]Yg

HYUW]b[GlfUhY[]Yg UbX F Uh]cbUY.

 $H\Y``YUfb]b[`UbX`UggYgga Ybh']b`h',]g`Wci fgY`]g`U]a YX`Uh'[]j]b[`ghi XYbhg`h\Y`fYU```]ZY`YI dYf]YbWY`ZcfUdd`m]b[`UbX`Z fh\Yf`Yb\UbW]b[`h\Y]f`_bck`YX[Y`UbX`g_]``g`]b`fY`Uh]cb`hc`h\Y]f`XY[fYY"$

H\Y`]bhYfbg\]d`g\W.YXi`Y`]g`gi ddcfhYX`VmU`fYUX]b[`dfc[fUa`h\UhYI Ua]bYg`X]ZZYfYbhUddfcU\W.Yg`hc`h\Y gh XmcZcf[Ub]gUh]cbg`fh\Y]f`ghfi \Wi fYž`Z b\W]cbg`UbX`dc`]\W]Yg\E`UbX`ghi XYbhg`UfY`YI dY\WYX`hc`]XYbh]Zm`]b_g`hc`h\Y]f`d`U\Wa YbhYI dYf]Yb\W'"

Gh XYbhg'k]```qdYbX`%\$) '\ci fg'k cf_]b['UhU'\cghcf[Ub]qUh]cb [YbYfU``mcbY cf'kk c'XUmg'dYf'k YY_'hc 'Zh

Ufci bX'h\Y'hYb'k YY_'hYfa "'H\Y'ghi XYbh']g'U``cWUh'X'U`\cghigi dYfj]gcf'k \c'k]```dfcj]XY'cf]YbhUhjcbž ZYYXVUW_'cb'h\Y'ghi XYbhg'k cf_'UbX'gi ddcfh''7 cbgi `hUhjcb'k]h\'h\Y'\cghigi dYfj]gcf'WJb'Ugg]ghi]b'[U]b]b[UWW'gg'hc'fY'Yj Ubh']bZcfa Uhjcb'UbX'XcW a Ybhg'Ug'k Y```Ug'U''[fYUh'Yf']bg][\hi]bhc'\ck 'h\Y'U[YbWn'k cf_q"

5g'h\]g'Wci fgY']bWcfdcfUhYg'U'fYUX]b['dfc[fUa ž'ghi XYbhg'UfY'Yl dYWhYX'hc'VY']bXYdYbXYbh'UbX'gY`Z X]fYWhYX'YUfbYfg"'H\Y'7 ci fgY'7 cbj Ybcf'a YYhg'ghi XYbhg'Ufci bX'XUm&'cZh\Y]f']bhYfbg\]d'UbX'h\Yb'cb'Ub Ug!bYYXg'VUg]g'k\]'ghdfcj]X]b['Ya U]'`UbX'#cf'hY'Yd\cbY'UWUXYa]Wgi ddcfh''C bW'h\Y'ghi XYbh\Ug W\cgYb'h\Y'gdYW]Z\WZcW g'Zcf'h\Y]f'YggUmgi a a Ufmik]h\'\Y'd'Zfca 'h\Y'7 ci fgY'7 cbj Ybcfž'h\Ym'UfY YI dYWhYX'hc''cWUhY']bhYfYgh]b['Ufh]WYg'UbX'a UhYf]U`'hc']bWcfdcfUhY']bhc'h\Y]f'gi a a UfmUbX'cf[Ub]gUh]cbU`YggUm'

Gh XYbhgʻUfYʻYbfc``YX`]b'<LA G&\$\$\$`UZhYfʻU`\cghcf[Ub]gUh]cb`\UgʻVYYbʻgci fWX`UbX`h\Y`7ci fgY 5\WXYa]W\Uq`YbXcfqYX`h\Y`]bhYfbq\]d"

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HUg_

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8i Y'XUhY

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@YUfb]b['Ci hWca Yg

5ggYgga Ybh% '9ggUmd`Ub 'gi a a Ufmž

+) \$ '-'%\\$\$\$ hchu`k cfX'Wci bh

&\$ i

 $6\,gW(\,b_\,\,a^*\,\,VSk\,)\,\,aXfZWha\,USf[a^*\,S^b'SUW_\,W\,\,f/\,[2Mz\,SXfWd)\,\,Xg^mVSke\,ZShWTWW\,\,Ua_\,b^MfWWzfi$

DfYW fgcfihcih\Yicf[Ub]gUh]cbU``YggUm''+) \$ihci%\$\$\$ik cfXg"'K f]hhYbiZYYXVUW_ik]h\]bi%\$ik cf_]b[iXUmg"

5XX]h]cbU`'XYhU]`g.

H\Y`ghi XYbha YYhg`k]h\ h\Y`5\WXYa]W7cbj Ybcf`UZhYf``&!`' XUmg`cZh\Y`]bhYfbg\]d`hc`X]gW`gg`UfYUg`cZ]bhYfYgh'Zcf'h\Y'hcd]WZcf'h\]g'YggUmgi a a UfmiflUbX'h\]g'hcd]W]g'a U]bhU]bYX'Zcf'h\Y''cf[Ub]nUh]cbU``'YggUm'Ł H\Y`hcd]W]g`U`ghUhYa Ybhicf`ei Ygh]cb`h\Uh]bWcfdcfUhYg`U`ZYk`_YmUgdYWg`cZ`cf[Ub]nUh]cbU``h\YcfmY"["`h\Y ghti Whi fyžz bwhcb zw hi fyž Yuxyfg\]džwca a i b]wuhcbz wxu Yb[yg Yhwh uhwub vy wcgy mfy uhyx hc h y ghi XYbhqi]bhYfb hUg_q" Ghi XYbhq WUb i gY Ub Uddfc UWX h\ Uh]bWcfdc fUhY g Y" [" Ub cf[Ub]nUh]cbU``dYfgdYWfj Yža UbU[Ya YbhdYfgdYWfj Yž_bck `YX[Y`dYfgdYWfj Y`cf'WUb```cc_'Uhigca Y cf[Ub]nUhcbu``a cXY`g'UbX'hYghici h']Zh\YmUfY'YI d`U]b'\ck 'h\Y]f'\cghicf[Ub]nUhcb'Z bWhcbg"''H\Y glfi Wi fY cZh\]g dUdYfk]``VY WUf]ZYX YgdYWJU``m]Zgh XYbhg`\Uj Y bchWca d`YhYX Ub YggUmgi a a Ufm VYZcfY"5`h\ci[\'U'gi a a Ufmž']h]q'hc'VY'k f]hhYb'Uq'Ub''UWUXYa]WdUdYf'gc'bchXch'dc]bhq"'Gh XYbhq XYj Y`cd Ub Uf[i a Ybhz UbX]XYbh]Zm\ck 'h\Ymd`Ub hc i gY fY`Yj UbhhYl hg UbX Ufh]WYg 'flgYY `Y[Ubhc Zcf ci f $\text{HYI hg "UbX" gi [[YghYX"]hYfUhi fYL'hc "gi ddcfhih\]g""} \text{Gi [[YghYX"]XYUg "UfY"g \ UfYX" Vmh\Y" 7 cbj Ybcfž" Ug "bYYXYXž" } \\$ UbX'gi ddcfhVmYa U]`UbX'Z ft\Yf'a YYh]b[g'UfY'dfcj]XYX"'Hk c''gYa]bUfg'UfY'cZZYfYX'Xi f]b['t\\Y'hYfa''Zcf dYYfigi ddcffziuwuxya]W[i]XUbWriubxig\Uf]b[icZ]bhYfbg\]diYIdYf]YbWrii±i]giWfi WJUizugih\YfYiUfYibc k YY_`mhi hcf]U`g`žh\Uhigh XYbhg`ghUfhfYUX]b[`'Ug`YUf`mUg`h\Ym\Wbžhc`'U\\e'i U]bh`'h\Ya gY`j Yg`k]h\''UgdY\\g cZcf[Ub]nUh]cbu``h\Ycfmih\Uh]bhYfYghih\Ya `UbX`UfY`fY`Yj Ubhihc`h\Y]f`\cgh'`A U_]b[``]b_g`k]h\`h\Y`fYUX]b[`hc cbYfgi^cghWUb'VY'YI WJhJb['UbX']bg][\hZ `"'Gh XYbhg'a i ghfYZYfYbWY'h\]g'dUdYf'k Jh\'Uh'YUghZJj Y'f) Ł'UffJWYg]b 'UXX]hcb 'hc 'h\ Y '`Y[Ubhc '`]ghk \]WX 'a YUbg 'h\ YmbYYX 'hc 'gci fWY 'Z] Y 'cf'a cfY 'fY`Yj Ubh'Ufh]WYg 'cf' WX UdhYfg cb h Y]f WcgYb hcd]W"

5qqYqqa Ybh'& FYZYWhji Y'>ci fbU'

GHJfhXUHY. Gh XYbhg hc UXX bch/g k YY_mcb h\Y]fYl dYf]YbW/ hc Ugg]gh]b ZbU`dUdYf"

@Yb[h\.'+)\$'!'%(\$\$'k cfXq

8YHJ]`g.

&bX'cZ&'Z|bU``YggUmg'+) \$'hc'%(\$\$'k cfXg"'K f]hhYb'ZYYXVUW_k]h\]b'%\$'k cf_]b['XUmg"

5XX]h]cbU`XYhU]`g.

cfia cghighi XYbhgih\]gi]giUbYbchUVYdudYfircWtadYhY"+i]gia UXYYUg]YfVmUXX]b[igca YibchYgiYUWk k YY_hciUichik \Uhih\Yighi XYbhicVgYfj Ygž]gigi fdf]gYX'VmžUgik Y```UgiWkU``Yb[]b[ia ca YbhgicfhUg_gžUbXi\][\int][\int] hQih\Uhi\Yidig\ckihkUhih\Yi]bhYfbi]gidfc[fYgg]b[ik]h\jog\ginverseteq [YozhkY]f]bXi ghfmž +i]gifYWtaa YbXYX'ihcifYUX'UbiUfh]WYicfik cicbimi]bhYfbg\]dgimYUfimcbi]bih\Yi]bhYfbg\]diffh\YfYUffia Ubmthci[U]bigca Yi]bg][\hi]bhcih\YichgubX'WkU``Yb[Ygih\UhiWbiVYYIdYf]YbWXi]biUbi]bhYfbg\]d" +a Umi[]jiYighi XYbhgiWtbZ]XYbWYihcihUw_YiUiWkU``Yb[YYUfimcbif]Y"["iVY]b[i[]jiYbifYdYh]hjiYiHug_gžcfibchfYWY]jb[Ybci [\intZYYXVUW_icbicbYfgik cf_t"Ghi XYbhgiUfYiYIdYWYX'ihciW]hYiZfcailk cihcih\fYY'`Ufh]WYgicb]bhYfbg\]dgizZfcaigYjiYfUid]YWYgicZcf[Ub]gUhJcbU```]hYfUhifYzg\UffY[ccXiYIUadiYgiZfcailh\]gi]bhYfbg\]drcgiddcfhih\Y]fWtaa YbhgiUbXihci]bWiXYiUbgkYfgihch\Yifei YghJcbgidfcj]XYX''cbiAccXY"'5iV]Vi]c[fUd\m]ghcVYi]bWiXXXk]h\ih\YiUfh]WYgih\Uhih\Yighi XYbhi\UgiW]hYXiZfcailugik Y``]hYagiZfcaih\YiY[Ubhc`]ghih\UhiUfYighi XYbhi`\UgiW]hYXiZfcailugik Y``]hYagiZfcaih\YiY[Ubhc`]ghih\UhiUfYighi XYbhi`\UgiW]hYXiZfcailugik Y``]hYagiZfcaih\YiY[Ubhc`]ghih\UhiUfYighi XYbhi`\UgiW]hYXiZfcailh\Y]fiIb]jYfg]hmghiX]Yg"``H\]gidUdYfWUbVY

ghfi Whi fYX'Ug'h\Y'ghi XYbh'W\ccgYg'Y"[""]bhc'ghU[Yg'cZh\Y']bhYfbg\]d'cf'i g]b['h\Y'gi [[YghYX`\YUX]b[g'cb A ccX'Y"'=h']g']a dcfhUbh'h\Uhih\Y'ghi XYbh'Wb']bX]WhY'h\Y]f'dfc[fYgg'cb'\ck'h\Ym\Uj Y'h\YmYb[U[YX'k]h\h\Y']hYfUhi fY'UbX']XYbhJzmk\UhiYUfb]b['h\Ym\Uj Y'UW\]Yj YX']b'UfYUg'gi W\'Ug'h\Y'W\U`Yb[Y'cZa cj]b[\\Zca'h\Y'I b]j Yfg]hmgYhJb['hc'h\Y'k cf_d`UWY'fIYgdYWJU``m]Z]h']g'h\Y]f']fghi]bhYfbg\]d\\Z'h\Y']a dUWhcZ\X]j Yfg]hm'Ufci bX'h\Ya 'UbX'k\UhiYh\]W\'`'UbX'gc\JU'`fYgdcbg]V]]hJYg'UfY']bj c'j YX']b'h\Y]f']bXi ghfmcf'UfYU cZgdYWJU`hm'''@jhJb['_Ymg_]``g'UbX'bYk'__bck `YX[Y'[U]bYX'WJb'VY``]b_YX'hc'YI Ua d`Yg'Zfca'h\Y'ghi XYbhfig fc`Y'UbX'hUg_g'i bXYffU_Yb''

 $\label{eq:higher} \begin{tabular}{ll} High \$

5ggYgga Ybh' . 'Cf[Ub]gUh]cbU` 'YggUm

GhUfhXUhY. Bch5dd`]WUV`Y

@Yb[h\. &\$\$\$ k cfXg

8 YW] g.

%cZ&ii:]bU`YggUmg`&\$\$\$kcfXg"`Kf]hhyb`ZYYXVUW_k]h\]b`%\$`kcf_]b[`XUmg"

5XX]h]cbU`'XYhU]`g.

Ghi XYbhgʻUfYʻhcʻXYa cbghfUhYʻUbʻ]b!XYdh\ʻYb[U[Ya Ybhk]h\ʻh\YʻfY`Yj Ubhh\YcfYhJWD``_bck `YX[YʻUbXʻhcʻVY UVʻYʻhcʻX]gW ggʻh\]gʻk]h\]bʻh\Yʻk]XYfʻWcbhYl hcZ5i ghfU`]UbʻUbXʻcfʻ#cj YfgYUgʻk \YfYʻdcgg]V`Y"ʻ5gʻh\]gʻ]gʻUb cf[Ub]nUhjcbU``UbU`mg]gžghi XYbhgʻbYYXʻhcʻg\ck ʻgci bXʻʻg_]`ʻgʻ]bʻʻcWUhjb[žYj U`i Uhjb['UbX'i g]b['fY`Yj Ubh]bZcfa UhjcbʻUgʻk Y```Ugʻi g]b['h\Y]fʻ]b]hJUhj YʻUbXʻWfYUhjj]hm]bʻh\Yʻa UbbYfʻ]bʻk\]Wk\h\YmUddfcUW\h\Yʻhcd]W UbXʻh\YʻWcbWi g]cbgʻh\YmXfUk "'7 ca V]b]b['WUfYZ ``cVgYfj Uhjcbʻk]h\ʻg_]``Z ``HUWZ ``ei Yghjcbgʻhc gi dYfj]gcfgʻUbXʻch\YfʻhYUa 'a Ya VYfgʻk]``VYʻbYXYX'h\fci [\ci hh\Y]bhYfbg\]d"

Ghi XYbhgʻUfYʻYbWci fU[YX`hc`_YYdʻfY[i`UfʻWcbhUWik]h\`h\Y]fʻ5WUXYa]W7cbj YbcfʻZcfʻ[i]XUbWYžX]gW gg]cbcZk UmgʻhcʻXYj Y`cdʻh\]gʻUggYgga Ybh'UbX`Zcfʻh]dgʻcb`Z fh\YfʻfYUX]b["

FYgci fW/g

DfYgWf]VYX F Ygci fWYg

DF 9G7F ±698 F 9GC1 F 79G

: cf gh XYbhg]b BchZcf DfcZ|hfB: DŁ#Di V`]Wcf[Ub]gUh]cbg.

5b\Y]Yfž<Y`a i h? "'Bcb` 'DfcZ]hCf[Ub]gUh]cbg'. 'H\YcfnžA UbU[Ya Ybh'UbX'Dc`]Wh''&bX'YX]h]cb <cVc_YbžF ci hYX[Yž&\$%("'fl&bX'YX]h]cb']g'cb`]bY'UbX'a cfY'fYWYbhYX]h]cbg'UfY'Uj U]``UV'Y']b h\Y''Vcc_g\cd\"

D`i g'WkccgY'cbY'Zfca.

Cf[Ub]gUh]cb:H\YcfmUbX:8Yg][b:"'7Yb[U[Y:@YUfb]b[":F@'8UZh':\%ch":YX]h]cb":7]b\W]bbUh]":&\$\%)

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7\ccgY^&^hYI hg^Zfca ...

7 Y[[žG-A UbU[]b[UbX Cf[Ub]gUh]cbg-ZcfXYHJ]g gYY UVcj Yž

7 Yb[U[Y'fiF "'8 UZt: Cf [Ub]qUhcb H\YcfmUbX'8Yq][b! 'qYY'UVcj Yž

7ci fgY 9j U`i Uh]cb UbX 8Yj Y`cda Ybh

7CI FG9'9J5@ 5H€B'5B8'89J9@CDA 9BH'

: YYXVUW_7ca 'ghi XYbhg']g'k Y`Wca YX'UbX'`\][\`m'j U`i YX'Vmh\Y'7cbj Ybcf'k]h\`h\Y'U]a 'cZ]a dfcj]b[''h\Y XY']j YfmcZh\]g'7ci fgY"'Ghi XYbhg'UfY'k Y`Wca Y`hc'g\UfY'ZYYXVUW_Xi f]b[''h\Y'h\fa "''Hk c'gYa]bUfg'YUW\ h\fa 'k YfY']bhfcXi WfX']b''&\$% 'Ug'ghi XYbhg'k Y`Wca YX'h\Y'cddcfhi b]hm'hc''hc'a YYhch\Yf'< I A G&\$\$\$ ghi XYbhgžX]gW gg'h\Y'UggYgga Ybhg'UbX'hc'h\Y]f'g\UfY']bhYfb'YI dYf]YbW\"'Ghi XYbhg`\Uj Y'Ya d\Ug]gYX'h\Uh\h\YmZci bX'h\Y'cbY'cb'cb'cbY'Wcbgi `hUhjcbg'j Yfm\Y`dZ ``hc'Yb[U[Y'k]h\'h\Y'UWJXYa]Wg]XY'cZh\Y'gi VYWhž h\UgY'ci hU'dUff]W\Uf'ZcW gž\Uj Y'cf[Ub]gUhjcbU`'h\YcfmWUf]Z]YX']b'hYfa g'cZh\Y]f'\cghi'UbX'hc'[U]b [i]XUbW'cb''k \]W\"']hYfUhi fY'a UmVY'a cghi gYZ\"''A cfY'fYgci fWg'UfY'XYj Y`cdYX'Ug'fYei YghYX'UbX'UfY g\UfY'X' A mYI dYf]YbW'ZYYXVUW_]g'i gYX'hc'a U]bhU]b'UgdYWg'h\Uhk YfY'gYYb'hc'VY'\Y'dZ\"'UbX'hc'a cX]Zm cf'UXX'dfcWggYg'cf'fYgci fWg'hc'Ugg]ghghi XYbhg''

Gi Va]gg]cb cZ5ggYgga YbhHUg_g

Hi fb]h]b Gi Va]gg]cb

Image: Ybwei bhyfu'dfcv'ya k \yb'uhhya dhjb['hc'gi va]hmci f'Ugg][ba Ybhh\fci [\ 'Hi fb]h]bž'd'YUgY

Hy'Yd\cby'9| hy'fbu''Gi ddcfhcb'-',) '' ' ' %cf'Ya U]''h\Ya 'cb'Y! hy'fbu'hy'hgi ddcfh4 i bgk "YXi "Ui "''Gi ddcfh
\ci fg'UfY', .\$\$Ua '-'%\$.\$\$da 'cb'k YY_XUmg'UbX'-.\$\$Ua '-').\$\$da 'cb'k YY_YbXg'fl *) 'XUmg'U'mYUft'''=Z'mci
UfY'i bUV'Y'hc'gi va]hmci f'Ugg][ba YbhXi Y'hc'U'ZJi 'hk]h\ 'Hi fb]h]b'mci 'a Um'Udd'mZcf'Ub'Y! hy'bg]cbž'Vi hmci
a i ghfYhJ]b'mci f'h]W_Yhbi a VYf'Zfca '9! hy'fbU''Gi ddcfhfU'cb['k]h\ 'Ubmch\Yf'fy'Yj UbhXcW a Ybhgt'hc
]bWi XY'Ug'Yj]XYbW' hc'gi ddcfhmci f'Y! hy'bg]cb'Udd']WUh]cb"'=Zmci 'Ya U]''9! hy'fbU''Gi ddcfhmci 'k]'`
Ui hca Uh]WJ'`mfYW']j Y'U'h]W_Yhbi a VYfž'Vi h]Zmci 'hY'Yd\cbY'mci 'k]``bYYX'hc'gdYW]Z]WJ'`mUg_'Zcf'cbY''
Hi fb]h]b'U'gc'dfcj]XYg'i dXUhy'g'cb'h\Y]f'gmghYa 'ghUh' g'cb'Hk]hyf''

; YbYfU`mž'UggYgga YbhiHug_g'a i ghVY'gi Va]hhYX'Y`YVWfcb]\WJ``mij]U'Y]h\Yf'Hi fb]h]b'cf'U'A ccX`Y Ugg][ba Ybh''=b']bgHJb\W'g'k \YfY'h\]g']g'bchdcgg]V`Yž']hk]```VY'gHJhYX'cb'mci f'\\circ i fgY'g'A ccX`Y'g]hY'k]h\U`hYfbUh]j Y'gi Va]gg]cb'XYHJ]`g"

cfi]bZcfa Uhjcbicbi\ckihcigi Va]hUgg][ba Ybhgicbi]bYij]UiA ccXiY.i\hdg.#gh XYbhi bgk "YXi "Ui #\ck! gi Va]hUgg][ba Ybha ccXiY

5 WUXYa]W<cbYghmUbX D`U[]Uf]ga

D`U[]Uf]ga `]g`i g]b['h\Y`k cfXg`cf`]XYUg`cZch\Yfg`UbX'dfYgYbh]b['h\Ya 'Ug`mci f`ck b"'=h\Wb'hU_Y`a Ubm Zcfa qžZfca 'XY`]VYfUhY'W\YUh|b['hc`UWW]XYbhU`mWcdm]b['Zfca 'U'gci fW'k]h\ci h'UW_bck 'YX[Ya Ybh'

IBGK '[fci dg'd'U[]Uf]ga ']bhc'h\Y'Zc``ck]b['WUhY[cf]Yg.

7 cdm]b[.'i g]b['h\Y'gUa Y'cf'] Yfmg]a]`Uf'k cfXg'hc'h\Y'cf][]bU`h\I hcf']XYU'k]h\ci hUW_bck `YX[]b['h\Y gci fW'cf'i g]b['ei chUh]cb'a Uf_g"'H\]g'U'gc'Udd`]Yg'hc']a U[Ygž'Ufh'UbX'XYg][b'dfc'YWgž'Ug'k Y``'Ug dfYgYbhUh]cbg'k \YfY'gca YcbY'dfYgYbhg'Ubch\Yf'g']XYUg'cf'k cfXg'k]h\ci h'WfYX]h'

⇒ Uddfcdf]UhY 'dUfUd\fUg]b[...7\Ub[]b['U'ZYk 'k cfXg'UbX'd\fUgYg'k \]'Y 'a cghmfYhJ]b]b['h\Y'cf][]bU` ghfi Wh fY 'UbX#cf'dfc[fYgg]cb'cZ]XYUg'cZh\Y'cf][]bU'žUbX']bZcfa Uh]cb'k]h\ci hUW_bck `YX[Ya Ybh'H\]g'U`gc Udd`]Yg']b'dfYgYbhUh]cbg'k \YfY'gca YcbY'dUfUd\fUgYg'Ubch\Yf'g']XYUg'cf'k cfXg'k]h\ci hWfYX]hUbX'hc d]YW]b['hc[Yh\Yf'ei chYg'UbX'dUfUd\fUgYg']bhc'U'bYk 'k \c`Yžk]h\ci hUddfcdf]UhY'fYZYfYbW]b["

7 c``i g]cb. 'k cf_jb['k]h\ 'ch\ Yfg'Vi h'dUgg]b['cZZh\ Y 'k cf_'Ug'U'dYfgcb'g']bX]j]Xi U``k cf_"'7 c``i g]cb'U`gc]bWi XYg'dfcj]X]b['mci f'k cf_'hc'Ubch\ Yf'ghi XYbhVYZcfY'h\ Y 'Xi Y 'XUhYzcf'Zcf'h\ Y' di fdcgY'cZh\ Ya d`U[]Uf]g]b['Uh'Ubmh]a Yz'dUm]b['Ubch\ Yf'dYfgcb'hc'dYfZcfa 'Ub'UWUXYa]WhUg_z'ghYU']b['cf'UWei]f]b[Ubch\ Yf'dYfgcb'g' UWUXYa]Wk cf_'UbX'Wcdm]b[']hz'cZYf]b['hc'Wca d`YhY'Ubch\ Yf'dYfgcb'g' k cf_'cf'gYY_]b[dUma YbhZcf'Wca d`Yh]b['UWUXYa]Wk cf_"

±bUddfcdf]UhY`W]hUh]cb.`7]h]b[ˈgci fW/gˈk \]WX`\Uj Y`bchVYYb`fYUXžk]h\ci hUW_bck`YX[]b[ˈh\Y`″gYWcbXUfm″gci fW/Zfca ik \]WX`_bck`YX[Y`cZh\Ya`\UgʻVYYb`cVhU]bYX"

8 i d`]\WUh]cb`ffgY`Zd`U[]\Uf]ga "Ł`gi Va]\h]b[`mci f`ck b`k cf_ž]b`k \c`Y`cf`]b`dUfhžk \YfY`]h\Ug`dfYj]ci g`m VYYb`dfYdUfYX`cf`gi Va]\hYX`Zcf`Ubch\Yf`UggYgga Ybhcf\Wci fgY`UhI BGK `cf`Ubch\Yf`i b]j Yfg]\m'

7 cffYWhfYZYfYbWb[dfUWhWyg.

- DUfUd\fUq]b[žgi a a Uf]q]b[žYggUmk f]h]b['UbX'h]a Y'a UbU[Ya Ybh
- 5ddfcdf]UhY'i gY'cZUbX'Uhff]Vi h]cb'Zcf'U'fUb[Y'cZa UhYf]U`g']bWi X]b['hYl hž']a U[Ygž'Zcfa i `UY'UbX WbWYdhg"

±0X]j]Xi U``Ugg]ghUbWr`]g`Uj U]`UV`Y`cb`fYei YghZfca `H\Y`@YUfb]b[`7 YbhY`f\hd.#k k k "`Wi bgk "YXi "Ui #£" Ghi XYbhg`UfY`U`gc`fYa]bXYX`h\UhWUfYZ ``h]a Y`a UbU[Ya Ybh']g`Ub`]a dcfhUbhdUfhcZghi XmUbX`cbY`cZh\Y]XYbh]Z]YX`WUi gYg`cZd`U[]Uf]ga `]g`dccf`h]a Y`a UbU[Ya Ybh'`Ghi XYbhg`g\ci `X`U``ck `gi Z]W]Ybh'h]a Y`Zcf fYgYUfW\z`XfUZh]b[`UbX`dfcdYf`fYZYfYbW]b[`cZgci fWg`]b`dfYdUf]b[`U```UggYgga Ybh']hYa g"

IBGK @]VfUfmU`gc`\Ugʻh\Y`9@&9`hcc``UjU]`UV`Y`hc`Ugg]ghmci`k]h\`mcif`ghiXmUhIBGK"`9@&9`]g XYg][bYX`hc`]bHfcXiWY`bYk`ghiXYbhg`hc`ghiXm]b[`UhIBGK`Vih]hWUb`U`gc`VY`U`[fYUhfYZfYg\Yf`Xif]b[`mcif

- i bXYfgfUbX mci f'f][\hg'UbX'fYgdcbg]V]`]hJYg'Ug'U'gh XYbhUhl BGK
- VY`Uk UfY`cZd`U[]Uf]ga ž`Wcdmf][\hz'l BGK `Gh XYbh7cXY`cZ7cbXi WhUbX`5VWWdhUV`Y`l gY`cZ I BGK `=\forall H`F Ygci f\W\g`Dc`]\m\m
- VY 'Uk UfY 'cZh\Y 'ghUbXUfXg 'cZVY\Uj]ci f'Yl dYWYX 'cZYj YfmcbY ']b 'h\Y 'l BGK 'Wca a i b]hm
- `cWUHY 'gYfj]WYg'UbX ']bZcfa UH]cb'UVci hI BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZh\YgY'UfYUg'k]``VY'ZJa]`]Uf'hc'mci žch\Yfg'k]``VY'bYk"'; U]b]b['U'gc`]X'i bXYfgHJbX]b['cZU``h\YfY`UhYX'UgdYWhg'cZ9@&9'k]``\Y`d'mci 'a U_Y'h\Y'a cghicZmci f'ghi X]Yg'Uh'l BGK "'\\hd.##gi V'YWfi |XYg"`]VfUfm'i bgk "YXi "Ui #\`]qY#JVci hY`]qY