< Ufj UfX @Ui bWX Yg B Yk '7c\cfh'hc HfUbgZcfa 'Mci h\ 'Gi WWYgg =b]h]Uh]j Yg</pre>

I b]cb'7ci bhmž'G7'^c]bg'h\Y'&\$&)!&*'Gi WWYgg'D`Ubb]b[7ca a i b]hm'Uh'<Ufj UfXž'Yb\UbW]b['mci h\'XYj Y`cda Ybh h\fci [\'Wc``UVcfUh]j Y']b]h]Uh]j Yg"



I b]cb '7ci b hmž'Gci h\ '7Ufc`]bU'! '5g'Wca a i b]h]Yg'UWfcgg'h\Y bUh]cb 'ghf]j Y'hc 'Yb\UbW' mci h\ 'XYj Y`cda Ybhž'h\Y'9XFYXYg][b @UV g' \delta gh]hi hY'Zcf'Gi WWYgg'D`Ubb]b['Uh' < Ufj UfX'; fUXi UhY'GW\cc` cZ'9Xi WUh]cb '\Ug'hU_Yb'U'g][b]Z]WUbh'ghYd'Zcfk UfX"'FYWYbh`mž']h Ubbci bWYX']hg'Zci fh\ 'Wc\cfh'Zcf'h\Y'&\$&)!&* 'Gi WWYgg'D`Ubb]b[7ca a i b]hm'cZ'DfUWh]WYž'k\YfY'Z]ZhYYb'Wca a i b]h]Yg]bWi X]b[b]bY'fYhi fb]b['UbX'g]I 'bYk 'cbYg k]``Wc``UVcfUhY'hc'WfYUhY hU]`cfYX'fYgci fWYg'UbX'gi ddcfh'gmghYa g'Zcf'mci h\"

H\]g^]b]h]Uh]j Y^]g^bc^ga U```ZYUh"^#^U]a g^hc^WcbbYWhYUW\^W\]`X^cf mci h\ k]h\^U`XYX]WUhYX^UXi `h^BUj][Uhcf^k \c^k]```k cf_^U`cb[g]XY ZUa]`]Yg^hc^WfUZh^U^dYfgcbU`]nYX^UWh]cb^d`Ub"^Gi WWYgg^D`Ubb]b[ZcW'gYg^cb^h\Y^W\]`X g^ghfYb[h\g^UbX^bYYXgž]XYbh]Zm]b[fYgci fWYg

 $\label{thm:condition} $$ hc '\ Y' d' h \ Ya 'h \ f]j \ Y \ \ 'Ug' X Y h U] 'Y X' V m' h \ Y' < Ufj \ Uf X'; \ Un Y h h Y'' \\ DUfh] W] d Uh] b ['Wc a a i b] h] Y g z''] b Wi X] b ['C f` Ub X c z': `c f] X U z' k]```k c f_k] h 'a i `h] g Y W h c f' h Y Ua g z' k \] W 'Wc b g] g h' c Z'`Y U X Y f g' Z f ca 'g W c c` g mg h Y a g z' \ Y U` h \ 'Ub X' \ i a Ub 'g Y fj] W g z' W ca a i b] h m' c f[Ub] n Uh] c b g z' Ub X'` c \ WU`` c \ ZZ] W] U` g''' H \] g' W c`` U V c f U h] j Y 'Ud d f c U W '] g' g i d d c f h Y X' V m b c h U V `Y' c f[Ub] n Uh] c b g'`]_ Y 'h \ Y' 6 Uff': c i b X Uh] c b 'Ub X' H \ Y' K U`` U W c i b X Uh] c b 'h c 'U 'W Uf] b ['h c 'Y b g i f Y' h \ Uh' Y j Y f m' W]` X' \ Ug' U' d c g] h] j Y W c b b Y W h] c b 'h c 'U' W U f] b ['UX i `h''$

7 ca a i b]h]Yg \propto]b]b[: cfWYg

±0.h\]g``UhYgh`Wc\cfhž`fYhi fb]b[`Wcaaib]h]Yg``]_Y`GUb`5bhcb]cž
HYI Ugž'UbX`CU_`UbXž'7U`]Zcfb]Už'k]```g\UfY`h\Y]f`YI dYf]YbWYgž
k\]`Y`bYk WcaYfg'gi W\`Ug`: `]bhž'A]W\][Ubž'UbX`K]`a]b[hcbž
8 Y`Uk UfYž'Vf]b[`ZfYg\`dYfgdYWh]j Yg"`H\Y`dUfhbYfg\]d`acXY`g
XYj Y`cdYX`cj Yf`h\Y`Wci fgY`cZ'h\]g`]b]h]Uh]j Y`k]```hUW_`Y`]ggi Yg
fUb[]b[`Zfca`W\fcb]WUVgYbhYY]ga`hc`\ci g]b[`]bgYW'f]hmž
ZcW'g]b[`cb'h\Y`]adcfhUbW'cZ'Wcaaib]hm!Xf]j Yb`YZZcfhg`Zcf
dYfgcbU`]nYX`YXi WUh]cb'UbX`mci h\`XYj Y`cdaYbh"

5g'h\Ym'Ya VUf_'cb'h\]g'^ci fbYmž'h\Y']b]h]U`'d\UgY']bWi XYg'U
Gi a a Yf'K cf_g\cd'Uh'<Ufj UfX']b'\$\im\"'<YfYž'`YUXYfg'k]``'fYWY]j Y
ghfi Whi fYX'[i]XUbWY'hc'fYZ]bY'h\Y]f'ghfUhY[]Yg'UbX'Yb\UbWY
Wca a i b]hm'Yb[U[Ya Ybhž'Ybgi f]b['h\Ym'ghUfh'cb'gc`]X'Zcch]b["

$H\Y'=a\ dcfhUbWY'cZ'7fcgg!GYWhcf7c``UVcfUh]cb$

H\Y'Wc``UVcfUh]j Y'bUhi fY'cZh\]g']b]h]Uh]j Y'fYZYWhg'U'[fck]b[
i bXYfghUbX]b['h\Uh'hUW_`]b['Wca d`Yl']ggi Yg'cZhYb'fYei]fYg']bdi h
Zfca 'j Uf]ci g'gYWhcfg"'5g'\][\`][\hYX'Vm'

9WcgmghYa g(=bbcj Uh]b[ž'gi WWYggZ `'Wfcgg!gYWhcf
Wc``UVcfUh]cbg'Vf]b['hc[Yh\Yf'X]j YfgY'dYfgdYWh]j Yg'UbX
fYgci fWYgž'k\]W\'UfY'YggYbh]U`'Zcf'WfYUh]b['gWU`UV`Y'UbX
gi ghU]bUV`Y'gc`i h]cbg"'H\YgY'dUfhbYfg\]dg'UfY'bch'g]a d`m
VYbYZ]W]U` h\Ym'UfY'Wf]h]WU`']b'UXXfYgg]b['h\Y']bhf]WUhY
W\U``Yb[Yg'ZUWYX'Vm'mci h\'hcXUm"

Hc'UhhfuWh']bhYfYgh'UbX'Yb[U[Ya Ybhž']hg'j]hU``hc']XYbh]Zm'g\UfYX [cU`g'Ua cb['Wc``UVcfUhcfg"'Gi WWYggZi ``Yl Ua d`Yg'cZ'gi W\ j Ybhi fYg']``i ghfUhY'h\Y'dchYbh]U``Zcf']a dUWhZi ``ci hWca Yg"'5g'h\Y Ufh]WY'gi [[YghgžYghUV`]g\]b['WYUf'fc`Yg'UbX'ZcghYf]b['U'W'`hi fY cZ'cdYb'Wca a i b]WUh]cb'WUb'g][b]Z]WUbh`m'Yb\UbWY'h\Y YZZYWh]j YbYgg'cZ'h\YgY'Wc``UVcfUh]cbg"

7fYUh]b[Cddcfhi b]h]Yg Zcf Mci h\

#D'``]bY'k]h\'h\]gžh\Y'YZZcfhg'hc'WfYUhY'Yei]hUV`Y'YWcgmghYag'Zcfmcih\'XYjY`cdaYbh'UfY'VY]b['Vc`ghYfYX'Vm'fYgcifWYg'giW\'Ug'U[i]XY'XYjY`cdYX'k]h\'giddcfh'Zfca'h\Y'5bb]Y'9"'7UgYm:cibXUh]cb"'H\]g'[i]XY'Yad\Ug]nYg'h\Y'bYYX'Zcf'WccfX]bUhYX]b]h]Uh]jYg'Uacb['mcih\!gYfj]b['cf[Ub]nUh]cbg'hc'Yb\UbW'fY`Uh]cbg\]dg'VYhkYYb'mcib['dYcd`Y'UbX'UXi`hg'UWfcgg'jUf]ciggYhh]b[gž'U'WcbWYdh'XYhU]`YX']b'597:"

9b[U[]b['cj Yf') \$'mci h\g'hc'WfUZh'hcc`g'`]_Y'h\Y'Mci h\' \\&i fbYm A Ud'Zcf'6Y`cb[]b['UbX'Cddcfhi b]hm']g'U'hYghUa Ybh'hc'h\Y]b]h]Uh]j Y g'Wca a]ha Ybh'hc'd`UW]b['mci b['dYcd`Y g'Yl dYf]YbW'g Uh'h\Y'ZcfYZfcbh'cZ'XYj Y`cda Ybh'YZZcfhg"' \(\delta \) Th\Yf'dfcj]XYg \(\text{YUXYfg'k]h\'h\Y'a YUbg'hc'W' \h]j UhY'gUZYhmž'Vi]`X'Wca a i b]hmž UbX'Ybgi fY'W' \hi fU`'fYgdcbg]j YbYgg"

±b 'gi a a Ufmž' Ug'h\Y'9XFYXYg][b '@UV'_]W_g'c ZZ'Ubch\Yf'Wc\cfh'Zcf]hg 'Gi WW gg'D`Ubb]b['7 ca a i b]hm'c Z'DfUWh]WYžh\Y'Ya d\Ug]g'cb Wc``UVcfUh]j Y 'UddfcUW\Yg'UWfcgg'gYWhcfg'c ZZYfg'U'dfca]g]b[Uj Ybi Y'Zcf'ZcghYf]b['dcg]h]j Y 'mci h\'XYj Y`cda Ybh''K]h\'h\Y'f][\h gi ddcfh'gmghYa g']b'd`UWYž'Wca a i b]h]Yg'`]_Y'Cf`UbXc'UbX'ch\Yfg\Uj Y'U'[ccX'\UbX'Uh'hfUbgZcfa]b['YXi WJh]cbU```UbXgWJdYgžYbqi f]b['Yj Yfm'W\]`X'WJb'bUj][UhY'U'qi WWYqqZi ``dUh\'Zcfk UfX"

lb]cb'7cibhmž'Gcih\'7Ufc`]bU
bYk g"\Ufj UfX"YXi
• YWcgmghYa g(]bbcjUh]b["Wca

8 Y hU]`g	
	• k k k "UYWZ"cf[

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