

NY]hi b[gVchY]b 6chhfcd.: U\fnYi [k À\fYbX XYf 5fVY]h [Yghc\ Yb

8]Y'Dc`]nY]'gi Wkh'NYi [Yb'bUWk'XYa '8]YVghU\`'Y]bYg : U\fnYi [g'Y]bYg'NY]hi b[gVchYb']b'6chhfcd"'<]bk Y]gY YfVYhYb"

6chhfcd"8]Y'G]WXYf\Y]h'Ui Z'XYb'GhfU»Yb'i bX'ÒZZYbh`]WXYb'D`ÀhnYb]gh'Y]b'nYbhfU`Yg'H\Ya U'ZØf'5bkc\bYf'i bX'; YkYfVYhfY]VYbXY"9]b'U_hi Y``Yf'JcfZU``'\Uh'YfbYi h'X]Y'5i Za Yf_gUa _Y]h'Ui Z'X]YDfcV`Ya Uh]_'j cb': U\fnYi [X]YVghÀ\`Yb']b'6chhfcd'[Y`Yb_h"

8]Y 'Dc`]nY] 'V]hhYh'i a 'A]h\]`ZY

 $8 \ Yf' \ 8 \] YVghU\ ``Y]bYg': \ U\ fnYi \ [\ g'Ui\ g'Y]bYf' HUb_ghY``Y']b'6chhfcd \\ Ua \ 'gd\ AhYb' \ 8 \ cbbYfghU[\ UVYbX'\ Uh'X]Y``c_U`Y'Dc`]nY]'U`Ufa \] Yfh'' \ 8 \ Yf VYhfc ZZYbY'NY]hi b[\ gVchYž'Y]b'*, !\A\f][\ Yfž'VYcVUW\ hYhY'XYb \\ J \ cfZU``ž'U`g'Y]b'I bVY_UbbhYf'g]W\ ']b'gY]b'i bVYk UW\ hYg'5i hc <math display="block"> qYhnhY'i bX'XUa \]h']b'F]W\ hi b[\ '\Delta bYbghUXh'XU] cbZi \ f''$

9]b: U``i cbi bni fY]WXYbXYfG]WXYf\Y]h

8 Yf'J cfZU``YfY][bYhY'g]W\'[Y[Yb'&'.'\$'I\fž'k À\fYbX'XYf
NY]hi b[gVchY'XUVY]'k Ufž'NY]hi b[Yb']b'gY]b': U\fnYi [ž'Y]bYb
< mi bXU]']&\$ž'ni ``UXYb"'Hfchn'XYf'HUhgUW\Yž'XUgg'XUg'5i hc
i bj YfgW\`cggYb'i bX'a]h'XYa 'GW\`ØggY``]a 'NØbXgW\`cgg'ghUbXž
k i fXY'Yf'_i fnnY]h]['Xi fW\'Y]b'; YgdfÀW\'a]h'Y]bYf'?c``Y[]b
UV[Y`Yb_h"'8]Y'gW\bY``Y'FYU_h]cb'XYg'8]YVYg'nY][hž'k]Y'k]W\h][
Yg']ghž'Ui W\'VY]_i fnYb'5Vk YgYb\Y]hYb'j cb': U\fnYi [Yb
G]W\Yf\Y]hgj cf_Y\fi b[Yb'ni 'hfYZZYb"

8Yf'HÀhYf']a : cWig'XYf'9fa]hh`i b[Yb

Dfàj Ybh]cbga U» bU\a Yb i bX H]ddg

8]Y 'Dc`]nY] '\ Uh'Ub 'X]Y '2 ZZY bh`]W_Y]h'UddY``]Y fhž']bgVYgcbXYfY
XUfUi Z'ni 'UW\hYbž'XUgg': U\fnYi [Y'ghYhg'UV[YgW\`cggYb'i bX'X]Y
GW\`ØggY``b]W\h']a 'NØbXgW\`cgg'[Y`UggYb'k YfXYbž'gY`Vgh'k Ybb
a Ub 'bi f'_i fn'UVk YgYbX']gh'' 8 Yf'U_hi Y``Y'8]YVghU\``nY][hž'k]Y
gW\\bY```HÀhYf'ni gW\`U[Yb'_ObbYb ž'gc'Y]b'Dc`]nY]gdfYW\Yf''
5bk c\bYf'k YfXYb'Yfa i h][hž'g]W\`VY]'gUW\X]Yb`]W\\Yb'<]bk Y]gYb
i bhYf'XYf'_cghYbZfY]Yb'Bi a a Yf'\$, \$\$'#&' *%'%%'ni 'a Y`XYb''

K]WX h][_Y]h j cb ; Ya Y]bgWX UZhgi bhYfghØhni b[

8]Y'l bhYfghØhni b['XYf'; Ya Y]bgW\UZh']gh'YbhgW\Y]XYbXži a gc`W\Y'?f]a]bU`]hÀh'ni 'fYXi n]YfYb"'K Ybb'5bk c\bYf'k UW\gUa g]bX'i bX'j YfXÀW\h][Y'5_h]j]hÀhYb'gcZcfh'a Y`XYbž'_Ubb'X]Y'Dc`]nY] [Yn]Y`hYf'Y]b[fY]ZYb"'8]YgY'5fh'j cb': À``Yb'Yf]bbYfh'i bg'XUfUbž'k]YgW\bY```g]W\G]hi Uh]cbYb'j YfÀbXYfb'_ÒbbYb'i bX'k Y`W\Y'Fc``Y'k]f U``Y'VY]'XYf'G]W\Yf\Y]h'i bgYfYf'BUW\VUfgW\UZh'gd]Y`Yb"

K]f``YVYb`]b`Y]bYf`NY]hž']b`XYf`X]Y`G]W\Yf\Y]hii bgYfYf`I a [YVi b[b]W\ha Y\f`U`g`gY`Vghj Yfgh\\bX`]W\`Ub[YgY\Yb`k YfXYb`_Ubb"`\XXYf_Ubb`Y]bYb`6Y]hfU[``Y]ghYbži a `Y]bY`g]W\YfY`; Ya Y]bgW\UZh`ni Z\\bYf\"

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'b!U["XY