

9bhXYW_Yb'G]Y'X]Y'VYghYb'I f`Ui Vgn]Y`Y ZØf'XYb'dYfZY_hYb'; b]°

9bhXYW_Yb^G]Y^X]Y^VYghYb^FY]gYn]Y^Y^]a '> b]^&\$&) 'a]h Ub[YbY\a Yb^HYa dYfUhi fYbz'k Yb][Yf^Hci f]ghYb^i bX UhhfU_h]j Yb^DfY]gYb"



GØXZfUb_fY]W ž: fUb_fY]W !!8Yf'A cbUh'¾ b] [] h'U'g']XYU'Yf
NY]hfUi a 'ZØf'Y]bYb'Gca a Yfi f'Ui V"'5b[YbY\a Y'HYa dYfUhi fYb']b
9i fcdUžX]Y']b'XYf'FY[Y`b]W h'gc'\Y]» 'g]bX'k]Y']a '¾ `]'cXYf
5i [i ghža UW Yb'X]YgY'NY]h'VYgcbXYfg'UhhfU_h]j "'8 UfØVYf'\]bUi g
g]bX']b'XYf'YfghYb'¾ b]\À`ZhY'X]Y'DfY]gY'cZh'[Øbgh][Yfž'XU'X]Y
<cW\gU]gcb'bcW\'b]W\h'VY[cbbYb'\Uh'i bX'kYb][Yf'Hci f]ghYb
i bhYfk Y[g'g]bX"'8]Yg'Yfa Ò[`]W\h'Yg'FY]gYbXYbž'gck c\``VY`]YVhY
FY]gYn]Y`Y'U`g'Ui W\'; Y\Y]a h]ddg'ni 'YbhXYW_Yb"'8 Yg]fYX
VYf]W\hYhž'XUgg'U[]`': fØ\Vi W\Yf'Xi fW\'fYW\hnY]h][Y'D`Ubi b['b]W\h
bi f'; Y`X'gdUfYbž'gcbXYfb'Ui W\'ØVYfZØ``hY'CfhY'a Y]XYb'_O`bbYb"

Ni 'XYb'VY`]YVhYb'FY]gYn]Y`Yb']a '⇒ b]'nÀ\`Yb'bYVYb'_`Ugg]gWXYb I f`Ui VgfY[]cbYb'k]Y'GØXZfUb_fY]WXž'A m_cbcg'i bX'XYf 5a U`Z]_ØghY`Ui W\`fi \][Y`GhfÀbXY`i bX`GhÀXhY"`8]YgY`C fhY
ØVYfnYi [Yb`Xi fW\`a cXYfUhY`HYa dYfUhi fYbž`X]Y`]b`gØX`]W\Yb
; Y[YbXYb`k]Y`G]n]`]Ybž`6UfWY`cbU`i bX`XYf`7ĐhY`X 5ni f`i a `X]Y`&)
..7``]Y[Yb"`5i W\`Ui Z`XYb`6U`YUfYbž`]b`; f]YW\Yb`UbX`i bX`Ub`XYf
HØf_]gW\Yb`F]j]YfU`g]bX`X]Y`6YX]b[i b[Yb`ni a `9bhgdUbbYb`Ua
GhfUbX`Ài »Yfgh`Ub[YbY\a ž`XU`X]Y`Hci f]ghYbnU\`Yb`bcW\`b]W\h`Ui Z
]\fYa `<Ò\Ydi b_h`q]bX"`

J]Y ZA h][Y 5b[YVchY ZØfFY]gYbXY

8 Yf'c ZZ]n]Y``Y'Gca a YfVY[]bb']b''9i fcdU'ZÀ``h'Ui Z'XYb'&%"''\$ b]ž'k Ug VYXYi hYhž'XUgg'j]Y`Y'FY]gYbXY'bcW\'j cf'XYb'Gca a YfZYf]Yb']b Y]b][Yb'6i bXYg`ÀbXYfbž'X]Y'Yfgh'A]hhY'\$ b]'ghUfhYbž']\fY'5i gZØ[Yd`UbYb'_ObbYb''': Øf'FY]gYbXYž'X]Y'Y]bYb'fi \][YfYb'I f`Ui VV'j cfni [Ybž'[]Vh'Yg'Ui W\'nU\`fY]W\Y'Cdh]cbYb''UVgY]hg'XYf A UggYb'''\$ b]']gh'XUa]h'Y]bY'\Yfj cffU[YbXY'NY]hž'i a 'bYi YFY]gYn]Y`Y'ni 'Yf_i bXYb''

5 i ghfu`]Yb`\]b[Y[Yb`Yf`YVh`]a \rightarrow b]'K]bhYf"'8cW\'gY`Vgh`\]Yf'[]Vh Yg`FY[]cbYbž']b`XYbYb`X]Y`HYa dYfUhi fYb`V]g`ni ''\$`..7`YffY]W\Ybž i bX`X]Y`FY]gYbXYb`X]Y`ghfU\`YbXY`GcbbY`[Yb]Y»Yb`_\ObbYb\"\bar{B} HfUj Y``Yf``]ghYh`]bg[YgUa h'%+ 'Hcd!FY]gYn]Y`Y`ZØf`XYb`A cbUh'\\bar{b}\ZX]Y`]b``YXYf`<]bg]W\h'\ØVYfnYi [Yb"

$6Y^{Y}YhY^{F}Y]gYn]Y^{Y}]a^{-} + b]$

GØXZfUb_fY]WX	
A m_cbcg	
5a U`Z]_ØghY	
G]n]`]Yb	
6UfWY`cbU	
6U`YUfYb	

8 YhU]`g	
Cfh	GØXZfUb_fY]W\z`: fUb_fY]W\
EiY``Yb	• k k k "XYg]fYX"XY
	• k k k "WbhfUj Y``Yf"XY