

J Yf_Y\fgWX Ucg'Ub'<]a a Y`ZU\fh.'; cc[`Y A Udg'nY][h'ZU`gWX Y'GhUi g']b'< YggYb°</pre>



< YggYbž'8 Yi hgWk `Ub X '! '5a '&- "'A U]' & \$ &) 'dfÀgYbh]Yfh'g]Wk 'X]Y
J Yf_Y\fg`U[Y']b' < YggYb'ni '<]a a Y`ZU\fh'Ub[YgdUbbhž'YXcWk
b]Wk h'gc 'XfUa Uh]gWk ž'k]Y' i fgdfØb[`]Wk '[Ya Y`XYh'' @Ui h'Y]bYa
6Yf]Wk h'j cb'cd!cb`]bY'[UV'Yg'Ua '8cbbYfghU[a]hhU['GhUi g'i bX
ghcW_YbXYb'JYf_Y\f'Ui Z'XYb'5i hcVU\bYb'5) ž'5* ž'5+'i bX'5*+"
8]Y'I fgUWk Yb'\]YfZØf'g]bX'X]Y'\c\Y': U\fnYi [UbnU\`'gck]Y
a Y\fYfY'I bZÀ``Y'Ua 'J cfa]hhU["'Hfchn'X]YgYf'< YfUi gZcfXYfi b[Yb
a ØggYb'X]Y'5i hcZU\fYf'YXcWk'_Y]bY'_UhUghfcd\U`Yb'Ni ghÀbXY
VYZØfWk hYb/K UfhYnY]hYb'g]bX'nk Uf'ni 'Yfk UfhYbž'UVYf'X]Y
G]hi Uh]cb']gh\\UbX\UVVUf"</pre>

9fghUi b`]W\Yfk Y]gY'nY][h'; cc[`Y'A Udg'nU\`fY]W\Y'5i hcVU\b! GdYffi b[Yb']b'<YggYb'i bX'6UmYfb'Ubž'X]Y'g]W\'U`g'ZY\`Yf\UZh $\label{thm:condition} $$ YfUi gghY``Yb":5b`XYb'a Uf_]YfhYb'C fhYb'Z]Y*h'XYf'JYf_Y\f k Y]hYf\]b":8]YgY'8]g_fYdUbn'ZØ\fh'ni 'Yf\YV`]W\Ya 'JYfk]ffi b[ž'XU UbXYfY'? UfhYbX]YbghY'b]W\h'j cb'GhUi g'cXYf'GdYffi b[Yb VYf]W\hYb":9]b'GdfYW\Yf'j cb'; cc[`Y'VYgh\h][hYž'XUgg'XYf'JcfZU`` [YdfØZh'k]fXž'i bX'Yg'V`Y]Vh'i b_`Ufž'k Ug'X]Y'I fgUW\Y'ZØf'X]YgY ZU`gW\Yb'GdYffi b[g!A Y`Xi b[Yb']b'a Y\fYfYb'FY[]cbYb']gh":8]Y Dc`]nY]']b'H\Øf]b[Yb'\Uh'ni XYa 'Ui Z'\h\b`]W\Y': U`gW\a Y`Xi b[Yb']b X]j YfgYb'BUj][Uh]cbgX]YbghYb'\]b[Yk]YgYb"$

5_hi U`]g]Yfi b[Yb'VY]; cc[`Y'A Udg

8]Y'hYW\b]gW\Y'9bhk]W_\i b['j cb'; cc[\Y'A Udg'V\Y]Vh'b]W\h
ghY\Yb"'\DYf'U_hi Y\YYb'BUW\f]W\hVYf]W\hYh'Ghi hh[UfhYf
BUW\f]W\hYb\z\XUgg'; cc[\Y'A Udg'Y]bY'bYi Y'' 8!5bg]W\h\ZØf
; YV\Ai XY'Y]b\ZØ\fh\z\X]Y'g]W\a ca YbhUb']b\XYf'HYghd\UgY'VYZ]bXYh''
Bi hnYf'\UVYb'X]Y'A \O[\YW_Y]h\z\X]YgY': i b_h]cb'ni 'U_h]j]YfYb\z\
]b\XYa 'g]Y'VY]a 'BUj][]YfYb'\]bY]bncca Yb''8]Y'\U`VhfUbgdUfYbh
XUf[YghY\Yhb'; YV\Ai XY'Yfa \O[\YW\Yb'Yg\z\GhfU\Yby'\GhY\b'\G]g\Yf'\Ai ZY'i bX
JYf_Y\fg]b\Zcfa Uh]cbYb'VYggYf'ni 'Yf_YbbYb''\6]g\Yf'\k Uf'\X]YgY
: i b_h]cb'bi f']b'\XYf'?\UfhYbUbg]W\h'j\Yf\ZØ[\VUf'i b\X']gh'bi b'\Ui W\k\A\fYbX'\XYf'BUj][\Uh]cb'ni [\Ab[\Y\W\"'9]bY'c\Z]n]Y\Y\Y
GhY\Yi b[\bU\a Y'j cb'; cc[\Y'ni 'X]YgYa 'I d\XUhY'ghY\h'\Y\xcW\'bc\X\\Ui g''

$K]Y'; cc[Y'JYf_Y\fg]bZcg'Yf\A`h$

8]Y J Yf_Y\fgXUhYbYfZUggi b['VY]'; cc[`Y 'YfZc`[h'Xi fWX Ubcbma]g]YfhY'GhUbXcfhXUhYb'j cb'Bi hnYfbž'X]Y'; cc[`Y'A Udg'Ui Z]\fYb'5bXfc]X!Ga Ufhd\cbYg'j Yfk YbXYbž'k]Y'U``YUbhk cfhYb"XY Ui gZØ\f`]WX'Yf_`Àfh"8]YgY'8UhYb'k YfXYb']b'9WXhnY]h'ØVYfhfU[Ybž k Ybb'X]Y'; DG!: i b_h]cb'U_h]j]Yfh'i bX'X]Y'GhUbXcfhØVYfa]hh`i b[Y]b[YgWXU`hYh']gh"'Ni gÀhn`]WX'VYn]Y\h'; cc[`Y' \ddotbZcfa Uh]cbYb'ØVYf X]Y'5dd' K UnY ži a 'bcWX'[YbUi YfY'J Yf_Y\fga Y`Xi b[Yb'ni Yf\U`hYb"'GhUi g'k YfXYb'Yf_Ubbhž'k Ybb'j]Y`Y'Bi hnYf'Ui Z'Y]bYf GhfU» Y'`Ub[gUa 'ZU\fYbž'i bX'fYgi `h]YfYb']b'XYf'ZUfV`]WXYb ?YbbnY]WXbi b['XYf'Fci hY']b'Fch"

6Y]; cc[`Y`A Udg`k YfXYb'j YfgW\]YXYbY: UfVYb'j Yfk YbXYhži a

$X]Y'JYf_Y\backslash fg`U[Y'UbninY][Yb.$

- ; fUi 'i bX'6`Ui . Fci hYb'XYg'Bi hnYfg
- CfUb[Y.~Ub[qUa Yf~JYf_Y\f
- Fch. GhUi
- ; Y`V. `\c\Yg'J Yf_Y\fgUi Z_ca a Yb
- ; fØb. ZfY]Y : U\fh

8]YgY: i b_h]cbYb ni f'GhUi UbnY][Y'Yfa Ò[`]WXYb'Yg'; cc[`Y'A Udgž I a `Y]hi b[gYa dZY\`i b[Yb'VUg]YfYbX'Ui Z'U_hi Y``Yb

JYf_Y\fgVYX]b[i b[Yb'ni '[YVYb"'-\(\frac{1}{2}\)b\YfYggUbhYfk Y]gY'k]fX

ZYgh[Y\U'hYb\(\frac{2}{2}\)XUgg'XUg'`\(\frac{1}{2}\)b[ghY'GhUi YfY][b]g'XYf'K Y'h'`Ui h

; i]bbYgg!6i W. 'XYf'FY_cfXY'%-, \$'nk]gWXYb'DUf]g'i bX'@mcb'a]h

Y]bYf'@\(\frac{1}{2}\)b[Y'j cb'%+*'_a 'fY[]ghf]Yfh'k i fXY"'8Yf'`\(\frac{1}{2}\)b[ghY'GhUi ']b

8Yi hgWX`UbX'YfY][bYhY'g]WX'&\$%-'Ui Z'XYf'5, ii bX'5+'a]h'Y]bYf

@\(\frac{1}{2}\)b[Y'j cb'\&)'?]`ca YhYfb"'9]b'6`]W_'Ui Z'X]Y'ghYh][Y'9bhk]W_'i b[
j cb'; cc[`Y'A Udg'nY][h\(\frac{1}{2}\)XUgg'X]Y'5dd'nk Uf'i a ZUb[fY]WXY

: i b_h]cbYb'V]YhYh\(\frac{1}{2}\)XYbbcWX'b]WXh']a a Yf'ZY\`YfZfY]']gh\(\frac{1}{2}\)bgVYgcbXYfY'k Ybb'Yg'i a 'j Yf'\(\frac{1}{2}\)go']WXY'J Yf_Y\fg]bZcfa Uh]cbYb
[Y\h"

8 Y hU]`g	
J c f ZU``	JYf_Y\fgi bZU``
I fgUWXY	<pre>< c\Y': U\fnYi [UbnU\`ž'Y]b][Y'I bZÀ``Y</pre>
Cfh	< YggYbž8Yi hgWX`UbX
EiY``Yb	k k k "cd!cb`]bY"XY
	• k k k "ghi hh[UfhYf!bUW\ f]W\ hYb"XY
	• U``YUbhk cfhYb"XY

6Ygi WXYb G]Y i bg Ui Z. b!U["bYh