

91 hfYa \]hnY`]b`=hU`]Yb.'5`Ufa ghi ZYb ghY][Yb'V]g'ni'(\$'; fUX°

±NU`]Yb`Yf`YVh`UV`XYa '%%"'⅓b]'&\$&) 'Y]bY'<]hnYk Y``Y'a]h 5`Ufa ghi ZYb"'HYa dYfUhi fYb`ØVYf'' +'; fUX`]b'a Y\fYfYb FY[]cbYb`Xfc\Yb'[Ygi bX\Y]h`]WXY'F]g]_Yb"



± XYb VYgcbXYfg VYhfcZZYbYb; YV]YhYb Hcg_UbUž @Uh]i a ž A c`]gYž 6Ug]`]_UhUž 5di `]Ybž G]n]`]Ybž GUfX]b]Yb i bX ? U`UVf]Yb ig]bX HYa dYfUhi fYb nk]gWXYb '' * i bX '(\$; fUX dfc[bcgh]n]Yfh" 5i Z GUfX]b]Yb i bX G]n]`]Yb _ÒbbhYb gc[Uf K YfhY ØVYf (\$; fUX

YffY]W\h'k YfXYb"' \D'F ca 'g]bX'V]g'ni '' +'; fUX'i bX']b'A U]`UbX'V]g ni '') '; fUX'ni 'Yfk UfhYb"'8]Y' <]hnYk Y``Y'k]fX'j cfUi gg]W\h`]W\V]g ni a '%) "' → b]`UbXUi Yfbž'Y]b][Y'A YhYcfc`c[Yb'j Yfa i hYbž'XUgg'g]Y gc[Uf'V]g'ni a '%+"'cXYf'%, "' → b]`VYghY\Yb'V`Y]Vh"

K Ufbghi ZYb i bX [Ygi bX\Y]h`]WXY F]g]_Yb

I a 'X]Y'6Yj Ò`_Yfi b['ØVYf'X]Y'; YZU\fYb'XYf'<]hnY'ni ']bZcfa]YfYbž\Uh'XUg']hU`]Yb]gWXY'; Ygi bX\Y]hga]b]ghYf]i a 'hÀ[`]WX'<]hnY!
6i ``Yh]bg'ZØf'&+'GhÀXhY'\YfUi g[Y[YVYb"'5V'XYa '%%"'\$|b]'[]`h
5`Ufa ghi ZY'&'fbfUb[Yb']b'6cnYbž'7ca dcVcggU'i bX'DYfi []U"'8]YgY
Ghi ZY'k Ufbh'j cf'[Ygi bX\Y]h`]WXYb'F]g]_Yb'ZØf'VYgcbXYfg
j i `bYfUV`Y'; fi ddYbž'Y]bgWX`]Y»`]WX'A`hYfYb'A YbgWXYbž'?]bXYfb
i bX'WXfcb]gWX'?fUb_Yb"'5`Ufa ghi ZY'%'f[Y'Vb'[]`h'ZØf'bYi b'k Y]hYfY
GhÀXhY.'6c`c[bUž'6fYgW]Už': `cfYbnž': fcg]bcbYž'A U]`UbXž'F]Yh]ž
Fca ž'Hi f]b'i bX'JYfcbU"'8]YgY'Ghi ZY'g][bU`]g]Yfh'a Ò[`]WXY
[Ygi bX\Y]h`]WXY'F]g]_Ybž'X]Y']b'XYb'_ca a YbXYb'HU[Yb'Ui ZhfYhYb_ObbhYb"

BUWN hg 'V 'Y]VY b 'X]Y 'HY a dYfUhi fY b 'Y VY b ZU '`g '\ c W ž 'k Ug 'X]Y 6Y `Ughi b['ZØf'X]Y '6Yj Ò`_Yfi b['Yf\Ò\h'' 5a h`]W\Y 'GhY ``Yb 'VY hc bY b X]Y 'K]W\h][_Y]h 'XYf'J cfg]W\hga U \(b \) b U\a Ybž'i a '[Ygi b X\Y]h`]W\Y 6YY]b hfà W\h][i b[Yb 'ni 'j Yfa Y]XY b "'\=\b' XYf'J Yf[Ub[Yb\Y]h`\UhhY Y]b Y '\A\b`]W\Y' <]hnYk Y '`Y']a 'Gca a Yf' \& \& ('VYfY]hg'ni 'j]Yf Hc XYgZ\A``Yb']b'\=\U`]Yb'[YZØ\fhž'k Ug'X]Y' 8 f]b[`]W_Y]h'X]YgYf K Ufbi b[Yb'i bhYfghfY]W\h''

BUhi f_UhUghfcd\Yb'Xi fW\XX]Y'<]hnY

Ni gàhn`]W\`ni f`<]hnYk Y``Y`_àa dZh'#U`]Yb`a]h`K U`XVfàbXYb`]b

G]n]`]Yb`i bX`?U`UVf]Ybž'X]Y`Ui W\`Xi fW\`X]Y`\c\Yb`HYa dYfUhi fYb

VY[Øbgh][h`k YfXYb"'5_hi Y```g]bX`&' `6fàbXY`Ui Z`G]n]`]Yb`i bX`ØVYf
)) '9]bgàhnY`]b`?U`UVf]Yb`[Ya Y`XYh"'8]Yg`ghY``h`Y]bY`k Y]hYfY

<YfUi gZcfXYfi b['ZØf'X]Y`9]bgUhn_fàZhY`XUfž'X]Y`g]W\`XUfUi Z
_cbnYbhf]YfYb`a ØggYbž'X]Y`BUhi f_UhUghfcd\Yb`i bhYf'?cbhfc``Y`ni

Vf]b[Yb"

 $8] Y `U_hi Y``Y `G] hi Uh] cb `] b `=hU`] Yb `j YfXYi h`] Wk hž `k] Y `_`] a Uh] g Wk Y have the sum of th$

J YfÀb XYfi b[Yb Yl hfYa Y K YhhYfYfY][b]ggY VY[Øbgh][Yb _ObbYb i bX ghY ``h'gck c\ ``ZØf'X]Y 6Y\ OfXYb 'U`g'Ui W 'ZØf'X]Y 6Yj O`_Yfi b[Y]bY 'Yfbgh\ UZhY '< YfUi gZcfXYfi b['XUf": À ``h'X]Y '<]hnYk Y ``Y 'bc W ni gÀhn`]W a]h'UbXYfYb 'B Uhi fYfY][b]ggYb 'ni gUa a Ybž'_ObbYb 'X]Y : c`[Yb'[fUj]YfYbX gY]bž'k Ug'X]Y '8f]b[`]W _Y]h'Y]bYg'UXÀei UhYb B chZU``a UbU[Ya Ybhg'j YfghÀf_h"

#U`]Yb'ghY\h'U`gc'j cf'Y]bYf'XfÀb[YbXYb'<YfUi gZcfXYfi b["'8]Y
VYj cfghY\YbXYb'HU[Y'YfZcfXYfb'j cb'XYf'6Yj Ò`_Yfi b['k UWkgUa
ni 'gY]b'i bX'X]Y'9a dZY\`i b[Yb'XYf'; Ygi bX\Y]hgVY\ÒfXYb'ni
VYZc`[Ybži a ']b'X]YgYf'YI hfYa Yb'<]hnY'[Ygi bX\Y]h`]WkY'F]g]_Yb
ni 'a]b]a]YfYb"'8]Y'G]hi Uh]cb'V`Y]Vh'Ub[YgdUbbh'i bX'X]Y
_ca a YbXYb'HU[Y'_ÒbbhYb'YbhgWkY]XYbž'k]Y'[i h'XUg'@UbX'a]h
X]YgYf'<]hnY'i a [Y\Yb'_Ubb"

 $K Y]hYfY^* \oplus Zcfa Uh]cbYb^* \emptyset VYf^*X]Y^*9bhk]W_`i b[^*XYf^*<]hnYk Y^`Y^i bX] Y^*5i gk]f_i b[Yb^*Z]bXYb^*G]Y^*]b^*XYfk YghYb^*XY^i bX^\bU^*XY^*$

8 Y hU]`g	
Cfh	Fca ž +hU`]Yb
EiY``Yb	k k k "XYfk YghYb"XY
	• k k k "\bU"XY

6Ygi WXYb G]Y i bg Ui Z Y]bY!fY]gY "XY