

9j U_i]Yfi b[bUWX : i bX Y]bYf GdfYb[[fUbUhY]b ; UfhYb 5a 5 X Ua g\ Ài gWX Y b

5_hi Y``Y '9j U_i]Yfi b[']b '5UWX Yb 'bUWX '? Ua dZa]hhY `Zi bX 'Ua 5XUa g\ Ai gWX Yb '! 'GdfYb[[fUbUhY 'a]h 'NY]hnØbXYf 'YbhXYW_h" 6Yhfc ZZYbY '; YV]YhY 'i bX 'G]WX Yf\Y]hg\]bk Y]gY "

9j U_i]Yfi b[']b '5 UW Yb 'Ui Z[fi bX 'XYg : i bXYg 'Y]bYf 'GdfYb[[fUbUhY

±0.5UWX Yb 'k i fXY '\Yi hYž'Ua '%\$"'⇒ `]ž'Y]bY '9j U_i]Yfi b[']b 'Y]bYa; YV]Yh'fi bX'i a 'XUg'5XUa g\Ài gWX Yb 'Xi fWX [YZØ\fhž'bUWX XYa 'VY] 6Ui UfVY]hYb 'Y]bY 'XYi hgWX Y 'GdfYb[[fUbUhY 'a]h'NY]hnØbXYf YbhXYW_h'k i fXY"'8]YgY '9bhXYW_i b['ZØ\fhY'ni 'Y]bYa _ccfX]b]YfhYb '9]bgUhn 'XYg'? Ua dZa]hhY`VYgY]h][i b[gX]YbghYg'i bX XYg'CfXbi b[gUa hYgž'i a 'X]Y'G]WXYf\Y]h'XYf'5bk c\bYf'ni [Yk À\f`Y]ghYb"

BUWX '5VgWX`i gg'XYf'9j U_i]Yfi b['k]fX'X]Y'GdfYb[[fUbUhY _cbhfc``]Yfh'[YgdfYb[hž'i a 'Y[`]WXYg'F]g]_c'ZØf'X]Y'6Yj Ò`_Yfi b[ni 'VYgY]h][Yb"'8]Y'GhUXh'5UWXYb'k]fX'U``Y'6Yk c\bYf'ØVYf'X]YG]WXYf\Y]hga U» bU\a Yb'i bX'XYb': cfhgWXf]hh'XYf'9bhgWXÀfZ b[]bZcfa]YfYbž'i a 'HfUbgdUfYbn'i bX'G]WXYf\Y]h'ni '[Yk À\f`Y]ghYb"

I a 'X]Y'k Y]hYfY'5i gVfY]hi b['j cb' ⊕ Zcfa Uh]cbYb'ni '[Yk À\f`Y]ghYb i bX'X]Y'G]WXYf\Y]h'XYf'6Yj Ò`_Yfi b['ni '[Yk À\f`Y]ghYbž'Ya dZ]Y\`h X]Y'GhUXh'5UWXYb'U``Yb'6Øf[Yfbž'XYb'VYhfcZZYbYb'6YfY]WX'ni a Y]XYb'cXYf'i a ni ZU\fYbž'i a 'dchYbn]Y``Y'; YZU\fYb'ni j Yfa Y]XYb"

 $9g`]gh`k]Wk h][\check{z}`]b`gc`Wk Yb`G]hi Uh]cbYb`fi \][`ni `V`Y]VYb`i bX`XYb 5bk Y]gi b[Yb`XYf``c_U`Yb`6Y\ÔfXYb`ni `Zc`[Ybži a `X]Y`Y][YbY G]Wk Yf\Y]h`UbXYfYf`b]Wk h`ni `[YZ\A\fXYb"`8]Y GhUXh`5UWk Yb`UfVY]hYh`a]h`XYb`fY`Yj UbhYb`6Y\ÔfXYb`ni gUa a Ybži a `Y]bY`gWk bY``Y`i bX`YZZY_h]j Y`@Ògi b[`ZØf`X]YgY`G]hi Uh]cb`ni [Yk \A\f`Y]ghYb`i bX`X]Y`bcfa U`Y`CfXbi b[`gc`VU`X`k]Y`a <math>O[`]Wk$ k]YXYf\Yfni ghY``Yb"

8]Y'6Y\ÒfXYb'j cf'C fh'ghY\Yb'U``Yb'6Øf[Yfb'ni f'JYfZØ[i b[ži a : fU[Yb'ni 'VYUbhk cfhYb'i bX'I bhYfghØhni b['VY]'XYf'9j U_i]Yfi b[ni '`Y]ghYb"'8]Y'G]W\Yf\Y]h'i bX'XUg'K c\`Yf[Y\Yb'XYf'6Øf[Yf\UVYb'cVYfghY'Df]cf]hÀhži bX'U``Y'A U» bU\a Yb'k YfXYb'Yf[f]ZZYbži a 'X]Y'G]hi Uh]cb'_cbhfc``]Yfh'i bX'g]W\Yf'ni '`ÒgYb"

K]f Ya dZY\`Yb 'U``Yb '6Øf[Yfbž'g]W\ 'ØVYf'cZZ]n]Y``Y '? UbÀ`Y 'XYf GhUXh'5UW\Yb 'Ui Z'XYa '@Ui ZYbXYb 'ni '\U`hYb 'i bX '5bk Y]gi b[Yb gcf[ZÀ`h]['ni 'VYZc`[Ybž'i a 'X]Y 'G]W\Yf\Y]h'U``Yf'ni '[Yk À\f`Y]ghYb"; Ya Y]bgUa '_ÒbbYb'k]f 'X]YgY' < YfUi gZcfXYfi b['VYk À`h][Yb'i bX X]Y 'bcfa U`Y'@YVYbgei U`]hÀh']b '5UW\Yb'k]YXYf\YfghY``Yb"

 $K \]f'XUb_Yb'U``Yb'6\emptysetf[\ Yfb'Z\emptysetf'] \ f'J \ YfghÅbXb]gž'] \ fY'?ccdYfUh]cbibX'] \ fY'; \ YXi \ `X']b'X]YgYf'G]hi Uh]cb''8]Y'GhUXh'5UWXYb'UfVY]hYhibYfa \emptysetX`]WX'XUfUbž'X]Y'G]WXYf\Y]h']\ fYf'9]bk c\bYf'ni [Yk Å\f`Y]ghYb'i bX'dchYbn]Y``Y'F]g]_Yb'ni 'a]b]a]YfYb''$

Jcfg]Wkhii bX`Ni gUa a YbUfVY]h`g]bX`YbhgWkY]XYbXžii a `X]YgY i bj cf\Yf[YgY\YbY`G]hi Uh]cb`ni `VYk À`h][Yb`i bX`X]Y`G]WkYf\Y]h U``Yf`6Øf[Yf`ni `[Yk À\f`Y]ghYb"; Ya Y]bgUa `_ÒbbYb`k]f`X]YgY < YfUi gZcfXYfi b[`a Y]ghYfb`i bX`i bgYfY`; Ya Y]bgWkUZh`k Y]hYf qhÀf_Yb"

< YfUi g[Y[YVYb 'Ua '%\$"\$+"&\$&(

8 Y hU]`c

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