

>Y`Ybh_YnÅg A chj 1Wj g`Yj Å`



A chj 1Wj g`Yj Å`! ? YnXÅg

X1b

? ÅfY' < f'ž

<]j Uu cgž ZÅFZ] VĚa nYtž]ga YfYhYb`bÅj

bÅa Yh

G\ f [Y\ fhf' < Yffž

? ÅfY': fi "ž

<]j Uu cgžb] VĚa nYtž]ga YfYhYb`bÅj

G\ f [Y\ fhf': fU ž

? ÅfY' < f'# fi "ž

<]j Uu cgž VĚa nYthbYj Y ÅgbYa Y]ga YfYhYb

G\ f [Y\ fhf' 8Ua Yb i bX' < YffYbž

? ÅfY' < f'# fi "ž

<]j Uu cgž hÖW VĚa nYth

G\ f [Y\ fhf' 8Ua Yb i bX' < YffYbž

Hj` \j Ya `XYthY`Ub_ca a Yfž

<]j Uu cgž VĚa nYthY`_bYj Y ÅgbYa Y`hY`YgYb]ga YfYhYb

G\ f [Y\ fhf' 8Ua Yb i bX' < YffYbž

? ÅfY' < f'Ga]hž

<]j Uu cgž ZÅFZ] VĚa nYtž]ga YfhibÅj

G\ f [Y\ fhf' < Yff`Gwa]Xhž

? ÅfY': fi "'Ga]hž

<]j Uu cgžb] VĚa nYtž` \ ½Ugž]ga YfhibÅj

G\ f [Y\ fhf': fU `Gwa]Xhž

? ÅfY': f_"Ga]hž

<]j Uu cgžb] VĚa nYtžY[mYXØ ½ĭ ž]ga YfhibÅj

G\ f [Y\ fhf': fU `Gwa]Xhž

? ÅfY': f'"Ga]hž

<]j Uu cgžb] VĚa nYtž]ga YfhibÅj ž]ga YfYhYb`VgU ½] ½Udch

G\ f [Y\ fhf': fU `Gwa]Xhž

? ÅfY' >c\b`Ga]hž

? Yj ÅgVÅ`]j Uu cgž a ½ fÅ[YWĭ HUj Ub`Øn`Yh`_UdVg`Uh

@]WYf' < Yff`Gwa]Xhž

>Y[`Cbg_Yf`UhgQ[Y`g]`]b[Yb`gca """"gca `=cdg`c[]""
XYb""""

GHubXUFX`Zcfa i `UY[mic`mlub`½ ½gflUa Y`nbY`_U`]fXYhÅgÅhY[mÖg]½ VUbj U[mia U[Uh]bVUb` ½hUX

<]Yfa]hVYk YfVY]W`a]W`i a `X]YGHY`YUg""žX]YG]Y]b
""j ca """"U g[YgWf]WYb` \UWb"

>Y[`g`flj Yf`gca `g Uf`dÅ`YfYg`cVcdgU[`cdg`ÅYhdÅ""

GHubXUFX`Zcfa i `UY[mcb`]bY` \]fXYhYthi`½ ½gflUj ½Ugnc` ½g_cf

6Yri [b\ a YbX`U Z=afY`5bnY][YU Z""gWfY]WY]W
=>bYb""

>Y'Ybh_YnÅg A chj 1Wj g`Yj Å



>Y[\Ybj]gYf'h`'YfYg'cVcdgU[]''''XUhfYh''''''
GHubXUFX'Zcfa i`U'UbbU_Y'a U[nUf'1/2]1/2U'Z'c[m\c`'hU 1/2hUX'U'a Y[\]fXYh'hi'1/2 1/2h

6Yri [bYa a YbX'U Z=afY'5bnY][Y]b''''j ca ''''

>Y[`ÅgY'YfYg'cVcdgU['ca`Yb`YfZUFYb''''''j''''''
bi a a Yf''''''a YX'g'c'f']bhfYggY''

A]h[f'c»Ya `bhfYggY'\UWY]W`=afY'5bnY][YZØ'X]Y
Dcg]h]cb`Y]bYgYfZU'fYbYb'''''']b`XYf`5i g]UWY''''''j ca ''''''
[YYgYb''

GHubXUFX'Zcfa i`U'Y[mic`mub'1/2 1/2]fU'Y'Ybh_YnÅg_cfZ'La Y'mYhY[mia U[Uh]bVUb'j U[m\Yh]`UdVUb`'1/21/2

8YhYf'a][`Yb`ZcfbO'Y'g'UhgO[Y'XYb`UbbcbWfYh
g]`']b]ž'gca ''''

5i ZXUgj cb`=abYb`U g]YgWf]WYbY'GhY`YbUb[YWch
VYk YfVY]W'a]W [YfbYžk Y]''''

GHubXUFX'Zcfa i`U'1/2 1/2]Y'Ybh_YnÅg_cf

>Y['j]`Y'gO[Y'g]`']b[Yb'gca ''''

=W`VYk YfVY'a]W'i a`X]Y'GhY`Y'U'g''''

GHubXUFX'Zcfa i`U'1/2 1/2]Y'Ybh_YnÅg_cf

DÁ'bi j`Å'fYbXY'h]Xgdi b_hUfVY'XYf`Y[`Zcf''''c[`Y[`Yf
Ubg Uf][`Zcf''''

8YfnY]hUfVY]hY]W`ZØf''''''Ni`a Y]bYb`5i Z]UWYb'nÅ`\Yb''''

B n]h`'a cbXUh`Åbh\Ugnb'1/2 1/2`U'Y'Yb`Y[]`Zc[`U_cn]g] 1/2 Udch`YÉf'1/2]U

A chj 1Wj g`Yj Å !`¥fj YÅg

X'1b

bÅa Yh

>Y[`Yf]gÅ'f']bhfYggYfYh] XYhY'`cVžZcfX]''''

8]Y'GhY`Y]g]hZØf'a]W]j cb[f'c»Ya `bhfYggY]žk Y]''''

5 bbU_`U'a Y[a U[nUf'1/2]1/2U'Z'c[mia]ÅfhgnYfYbÅX'Uh`UXcthia i b_1b

>Y['j]` [YfbY`UfVY'XY`Zcf`YfžZcf`U''''

; YfbYk`ØfXY]W`ZØf`G]Y`UfVY]h]bzi a ''''

5 bbU_`U'a Y[a U[nUf'1/2]1/2U'Z'c[mia]ÅfhgnYfYbÅX'Uh`UXcthia i b_1b

A]bY'gmf_Yf`Yf''''

Ni`a Y]bYb`GhÅf_Yb'nÅ`\Yb''''

5 ``Y[Zcbhc]g]W'h`U'Xcbg]1/2 U]X`YÉf'1/2]U_cf

>Y['j]` g][Y`Uha]b`YbYgY'g U[\YX#j U[\YXYf`Yf''''

=W`XYb_Yžri`a Y]bYb`GWk`ÅWYb'nÅ`\Yb''''''5 VYf`]W
UfVY]hY`XUfUbža]W`]b`X]YgYa`6YfY]W`#X]YgYb`6YfY]WYb
ri`j YfVYggYf'b''

A Yb`Y['j]` [YfbY`ZcfVYXfY`XYhY#X]ggY
ca fÅXY#ca fÅXYf''

I hU]g]U[mYb[YgÅ[Y]XfYžXY`UbbU_`a i hU]g]U'Z'c[mgnYfYbÅ`YnY_Yb`U'hYfØ`YhY_Yb`ZY^`Xb]

>Y['j]` j`Å'fYj`Y'Y[bYh]h`'g]`']b[Yb`ZcfX]''''

=W`Y][bY'a]W`ZØf`X]YgY'Dcg]h]cbžk Y]''''

5 bbU_`YÉf'1/2]U'Z'c[mia]h`j`U[m]f`'Y'Ybh_Yn`U'a i b_1b

>Y Ybh_ YnÅg A chj 1Wj g`Yj Å`



GYj ca `Y[]_Y\UFHX`][YfYfZUF]b[]`z\UF`Y[\UZH`""

Nk UF`_Ubb`jW`_Y]bY`9fZUfi b[]b`""j cfk Y]gYb/XUZØf \UY]W`""

5a]_cf`a Å[`bYa `Xc`[cni½Uh`UXchihYfØYHbžXY`gnYfYbÅX`VYa i HUhb]`U`a ½g]HfØYH`_Yb`gnYfnYHihUdUgnHU`UH]XUH

A]bY`dfcZYgg]cbY`Y`_j U]Z]_U]cbYf#Å`fX][\YXYf j]f`Yf`h`_`Uhj Å`fY`dUggYbXY`h`_`YfYgj]f`_gca \YXg`_fU`""

A Y]bY`VYfi Z]WYb`E i U]Z]_U]cbYb`Yb]gdf`WYb`X`Yb` 5bZcfXYfi b[]b`⇒fYg]` bhYf`b\`a`Ybg`

5bbU`_U`Yf½g]HfØYH`_c[mia]`mYb`_`ÅdYggÅ[Y`_`hYgnbY`_U`_U`a Ugg]½U`a i b`_½U

=`ÖVhiUZ`a]b`hX`gca` ""zZcfVYXfYXY`Y[#ZfYa a YXY`Y[#Zcf`Åb[YXY`Y[#a]bj`]XYb`ca` ""

K Å`fYbX`a Y]bYf`NY]hUg`""\UY]W`a Y]bY`? Ybb]b]ggY]b`""j YfVYggYfH#Yfk Y]hYfH#] YfH]YZH`

9[m]UXchihYfØYHb`gnYfnYHihUdUgnHU`UhVYa i HU½g]U`Åg]U`_`ÅdYggÅ[`Ö`_`ÅdYggÅ[Y`_#i X½g]gnYfnÅgÅfY

A]hY`_gdYfHca` fÅXY`Yf`""

A Y]b`: UW[]W]Yh]gH`""

5bbU`_`Yf½g]HfØYH`_c[mia Y`nj`_`hYfØYHb`j` UbbU`_U`Y[bU[nēV`YfYXa` ÅbmY]Xz`hUdUgnHU`UH]X

A Ybg`Y[`UFVY`XYXY`\cg`""6`Yj`_`Y[`a`Y[Yh`_j`U]Z]WfYh]`""

K Å`fYbX`a Y]bYf`5fVY]hVY]`""V]b`]W`]b`""g\`f`gUW`_i`bX][`]Yk`cfXYb`""

9[m]UXchihYfØYHb`gnYfnYHihUdUgnHU`UhVYa i HU½g]U`Åg]U`_`ÅdYggÅ[`Ö`_`ÅdYggÅ[Y`_#i X½g]gnYfnÅgÅfY

GYj `bÅf`Y[`UFVY`XYf`]`Yh\Ö`hHya`dczZcfGÅ`a`Yf`Y[]_Y`bÖU[]h[\YX`c[]`]`XYfZcf`]gÅ`fXY`Yg`YX`j`Å`fY`Y[YbYh]`_`XY`_fU`_`XYf`Yf`Zcf`UhUFVY`XY`gca` ""

5i W`]b`gHfYgg][Yb`G]h`U]cbYb`j`YfbUW`Ågg][Y]W`b]W]h`Gcf[ZUhi`bX`; YbU`][]Y]H`8U`Yf`k`ÅfY]W`VYgcbXYf`g`[Y][]bYhZØf`X]Y`5bZcfXYfi`b[]b`U`g`""

5bbU`_Y`a`U[m]UF½g]HfØYH`_c[mia]ÅfH`YbbÅ`_`Å`_`Uh`½`½g]U`U`_cf½W]`a`i`b`_U`hUdUgnHU`UH]X`U`U`d`½b`

GYj `i`bXYf`dfYg`_`Ub`Y[`cdfYH`c`XY`\ÖY`g]UbXUFXYf`

5i W`i`bhYf`6YUgi`b[]W`U`H`]W`\`c\Y`E`i`U]hÅgg]UbXUF`XgVY]`

5bbU`_`ÅfnÅ`_Y`HhÅgÅfYz`_c[mi`_`ÅdYgj`U[mia`U[Ug][]`ÅbmY`_YhH`a`UgnH`_`ÖfbnYnYH`Yb`Xc`[cnb]

>Y[]`j`]`XYfZcf`_`U`Y`a`i`][\YXYX`Zcf`Uh`_ca`V]bYfY`a`]bY`]bhYfYggYf`a`YX`XYbbY`UbVf]b[]Y`gy`

Gca`]hk`ØfXY`g]W`ZØf`a`]W`X]Y;`Y`Y[Yb`Y]hYf[]WYbž`a`Y]bY`=bhYfYggYb`a`]hX]Ygyf`Dcg]h]cb`ri`j`Yf`_bØdZYb`

5bbU`_VYa`i`HU½g]HfØYH`_c[mignYa`Å`mYgYb`]g`bU[mēb`ÅfXY`_`Xgn`U`a`i`b`_U]f½b`h`

>Y[\UF`Yb`~]j`][]bhYfYggY]`""c[`Y[]`j`_`Y`gÅ`HhY`df]g`dÅ`UhZÅ`a`i`][\YXYb#W`UbWb`Zcf`Uhi`Xj`]XY`a`]b`j`]XYb`j`YX`UF`VY`XY`Zcf`Yf`

=W`]bhYfYgg]YfY`a`]W`[]Ub`n`VYgcbXYf`g`ZØf`X]Ygy`GhY`Yi`bX`k`ØfXY`a`]W`g\`f`ØVYf`X]Y;`Y`Y[Yb`Y]hZfYi`Ybž]b`XYf`Ni`g]a`a`YbUFVY]h]a`]h`⇒`bYb`a`Y]b`K`]ggYb`ri`Yfk`Y]hYf`b`

5bbU`_VYa`i`HU½g]HfØYH`_c[mignYa`Å`mYgYb`]g`bU[mēb`ÅfXY`_`Xgn`U`a`i`b`_U]f½b`h`

A chj 1Wj g`Yj Å

Gca `Xi `Ub'gY'ZfU'a]hj YX'U[H'7 J ža UHWYf'a]bY YfZUf]b[Yf'c[`] U]Z_U]cbYf XYbbY'g]`]b[g_fUj "

K]Y'G]Y'a Y]bYa `WY[YZØ[Hb'@WYbgU ZYbhbY'a Yb _ØbbYbžYbhdgfWYb'a Y]bY'9fZUfi b['i bX'a Y]bY E i U]Z_U]cbYb XYb'5 bZcfXYfi b[Yb X]YgYf 'Dcg]hcb"

5 n'ØbÅ`YhfU'ncX`_] \Ub[gÖncn]gU_cf'Åg'UbbU_`ÅfnÅ_Y HnÅgÅfYž`c[mia YbbnjfY]'`YbY`cnn]X`Yn'U'a i b_U

A]b'bi j ÅfYbXY'g]`]b[`gca `""`Zcf`""`\Uf'[]j Yhia][a i `][\XYb'Zcf'UhfVY'XY]'Yh\Ôh'Ya dcž hYUa a]`Ô`j cf'XYhYf'YggYb]Y hUhj ÅfY]'g'ubX'h` Uh UfVY'XY'hÅ'ha YX'a]bY`_c`Y[UYf'Zcf'UhbÅ'Yb XYUX`]bY"

A Y]bY'XYfnY]h[Y'Dcg]hcb'Ug`""V]YH'ha]f'X]Y ; YY[Yb\Y]hž]b'Y]bYa `Ubgdfi W'g c`Yb'i a Z'X'ri UfVY]h'bz'k c'X]Y'Yb[Y'Ni g'Ja a YbUfVY]hia]hia Y]bYb ? c`Y[Yb'i bj Yfn]W'WUf]gž'i a j YfY]bVUfH'f: f]gYb Y]bri `U'Hb"

5 bbU_`Yf]g]Už`c[mia]nYb'hi X]g]g]U'f'c'h]2'Y`U`Y'Yb`Y[]a i b_`X'gcf]b

I Xcj Yf'a]bY'Ubg Ufgca fÅXYf'gca `""ž`Uf`Y[`c[gÅ i Xj]_`Yh`""ZÅ'fX][\XYf"

Ni gÅn]W'ri `a Y]bYb'J YfUbk cfh]W_Y]Hb'Ug`""\UW]W'U'W': Å][_Y]Hb]b`""Yf'k cfVYb"

9i hfU_`ÅdYgÅ'AgY_#i X]g]`Yf]g]Už`La]_YhU`Y'Yb`Y[]12`]g'c'Xcb`_YfYgnØ`g]U'f'c'h]2'Y`Ågž`La]_`bYa `Z'`hÅ'hYbØ`ZØ[]bY_ ÖggY'gncfcg]b U'Zc[`U`_cn]g]`dcnE]Y] XXU

A chj 1Wj g`Yj Å ! ? ÅdYggÅ[Y_#_ÅgnÅ[Y_ X]b

bÅa Yh

A]ha cXYfga Å`Yf`""ž'a Yb`Y[`Ub'c[gÅ'gbU`_Y`""

""[g]ha Y]bY'a i H'Yf'gdfUWY/XUfØWYf`_]bU'g'gdfWYW]W`""

5 n'UbntubnY'j YX'Åg'Uh'Y[nÅV'Zc`nÅ`cbntub`WYgnÅ'hbnY'j Y_`Yf]g]U

>Y[`fÅXYf`ZfYa fU[YbXY'cj Yf`""

=W] YfZØ[YØWYf`g`f`[i H'? Ybbhb]ggY']b`""

B Ya `UbntubnY'j]žXY'a U[Uj'g]b]Yb`WYgnÅ'hbnY'j Y_`Yf]g]U

>Y[`Uf`Yb`Z b[YfYbXY'j]XYb`ca `""

=W`W'g]hny'gc`]XY; fi bX_`Ybbhb]ggY']b`""

B Ya `UbntubnY'j]`Åg_`ØnÅdgn]b]Yb`WYgnÅ'hbnY'j Y_`Yf]g]U

>Y[`Uf`""`Åfg'YfZUf]b[`]bXYbZcf`""

=W] YfZØ[YØWYf`""`>U`fY'9fZUfi b[`Ug`""

9[mUxc]h]Ø`Y]h' H'fØ`YHb`gnYfnY'hi'UdUgn]U`U]X`Yf]g]U

>Y[`Yf`Yb`YfZUfYb`Vfi [Yf`Uz`""

=W] YfZØ[YØWYf`[i H'? Ybbhb]ggY']b`""

Gn]Å`Ei [ÅdYg'gncž] Yf']ga YfYH`_`Wya i H'U]g]U

>Y[`a YbYf'U'Y[`W'g]XXYf'XYb'f][h[Y`_ca V]bU]cb UZ`""c[`""

=W`XYb_`YžXUgg]W`ØWYf`X]Y[]Y][bYH'? ca V]bU]cb U'g`""i bX`""j YfZØ[Y'

5 bbU_`Yf]g]Už`c[mia YbbnjfY`_]Y[nYbgÖncnch]U`_U_`ÅdYgÅ[Y]X

>Y Ybh_ YnÅg A chj 1Wj g`Yj Å`

: fYa fU[YbXY`_ca a i b]_UjcbgYj bYf **U g[YnY]WbYH? ca a i b]_UjcbgZ\][_Y]Hb**
-bZcfa 1Wj _`a Y[cgnhVgUÅgV]ncbncgXc`[c_`Ya U[nUF1h1gU`U`c`Å[½bU_

8YXi _hj `Uf[i a YbUj]cb **gW`i ggZ`[YfbXYg8Yb_Yb**
6]ncbncgXc`[c_`a Y[ÅfÅgY`Åg[ncfgÅg`UÅ`cbmY`a U[nUF1h1gU

@c[]g_`hÅb_b]b[**`c[]gWYg8Yb_Yb**
5nY_`AdnY`ÅgY`#ChYH`_dfVU`h`Åg`f` `1h[cbXc`hia ` Xcbj U` `gnYf`_YgnÅgYz`OggYfU_`1gU

5bUmtjg_Y`Yj bYf **UbUmtjgWY: Å\][_Y]Hb**
? ÅngÅ[`UXc`[c_`fÅgn`YH`g`ÅfÅ`_Y`ÅgÅfY

; cXY`]bhYfdYfgcbY` `Yj bYf **\c\Y`gcn]UY? ca dYHbn**
5`_c`Å[½_U`j U`i `UÅ`_cbmY[m0tha _`OXÅg`Åg`_ca a i b]_1Wj fUj U`i `ÅngÅ[

: cf\UbX`]b[gYj bYf **J Yf\UbX`i b[g[YgW]W**
A 1g] ½UUh`_U`j U`i `UÅ`_cbm0h`YH`Åg`]`ÅngÅ[`

DfÅgYbUj]cbgYj bYf **DfÅgYbUj]cbgZ\][_Y]Hb**
5`_ÅngÅ[z`c[mgc_`Ya VYf`Y` h`i_`AdYg`UÅ`_cbntub`Y` UXb`]`h`Ch`YH`]h

A chj 1Wj g`Yj Å`! @Yn1E1g

X1b **bÅa Yh**
>Y[`Yf`a Y[Yha chj YfYhc[`gYf`ZfYa `h` `XYhj Uf]YfYh **=W`V]b`cW`a chj]Yfhi bX`ZfYi Y`a]W`U` ZX]Yj]YgY]H[Y**
UFVY`XY`gca `Yb`g]`]b[`]`YfYg]]f_gca `YX`_Ub **HÅH[_Y]h`X]Y`a]f`Y]bY`Dcg]h]cb`]b`=fYa `I` bhYfb\`a Yb**
h`VnXY`a][" **V]YHb`k`ØFY`"**
@Yn1E1g]½`a Y[]ga ÅH`j Yz`c[mia Ybbr]fY`gnYfYbÅ`Uj ½UUhU_`Xc`[cnb]`

>Y[`gYf`bmY`cd[Uj Yf`#XYbbY`g]`]b[`gca `Yb **=W`g\`YX]Y`bYi Yb`5i Z[UWb`#X]YgY`Dcg]h]cb`Ug**
j`Y`_ca a Yb`i XZcfXf]b[z`gca `Y[`gYf`ZfYa `h`" **k`]`_ca a YbY`< YfU`gZcfXYfi b[zU` ZX]Y]W`a]W`ZfYi Y`**
@Yn1E1g]½`a Y[]ga ÅH`j Yz`c[mia Ybbr]fY`gnYfYbÅ`Uj ½UUhU_`Xc`[cnb]

>Y[`hU[Yf[`YfbY`]a cX`a i `][\XYb`Zcf`UhX]g_i hYfY **=W`k`ØFY`a]W`g\`f`ØVf`X]Y`; Y`Y[Yb\`Y]h`ZfYi Ybž**
mXYf`][YfY`XYH`Yf`ca `g]`]b[Yb`a YX`X][**k`Y]hYfY`8`YH]`gri`XYf`Dcg]h]cb`a]h`=bYb`dYf`gCb`]W`ri**
dYfgcb`][h` **VYgdf`W`Yb`"**
@Yn1E1g]½`Z`j]`UbHUb] Y[m`Y`Y`H`gÅ[Yg]bhYf`Ch

>Y`Ybh_YnÅg A ch`j 1W`j g`Yj Å`



8i`_Ub`Z bXY`a]hfyg` a Å`#7J` j`YX`U `H` GhUbXUX`Zcfa`i`_U`UbbU`_`YF`1/2`1/2`L`Z`c[mU`7J` _`U`V`U`r`c`a` 1/2`m`U`b`j` Ub	5bVY]`YF`U`H`Yb`G]Y`a` Y]bYb`@`W`Y`b`g`U` Z`
>Y[`_Ub`g`_UZY`fYZfYbWf`ZFU`""`<j`]g`b`O`X`j` YbX][` H` GhUbXUX`Zcfa`i`_U`UffL`Z`c[mibn]r`chj` U[mifYZfYbW]1/2`_`UX`1/2`U	5i`ZK` i` bgW`g`YbXY]W`=`bYb`[`Yf`b`Y`X]Y`NYi` [b]ggY`j` cb`""` ri` "
F`YZfYbWf`_`Ub`fY`_j`]YfYg`ZFU`""` 5`bbU`_`YF`1/2`1/2`L`Z`c[mih`Xgn`c`nb]`fYZfYbW]1/2`Å`g`Z`c[m`_`h`_`YfYggYbY`_`Å`f`Y	NYi` [b]ggY`_`ObbYb`WY]`""`Ub`[`YZcf`XYf`hk`Yf`XYb`"
>Y[`Yf`YX][` h` `Yh]bHYf`]Yk` `XYb`""` 5`bbU`_`Uh` Xca` 1/2` `UX`1/2`1/2`L`Z`c[mgnU`U`X`j` U[miY[m]bHYf`Ö`U	:` Ø`Y]b`J` cf`gh`Y`i` b[g]`Ygdf`ÅW`g`h`Y`Y]W`Ua` `""`ri` f` J`Yf`Z`Ø`i` b["`
HU`Zcf`X]b`h`X`c[`cj` Yfj` Y`Y`gY`">Y[`gYf`Z`fYa` `h` a`i`][`Y`Y`Yb`Zcf`Yb`dYf`gcb][`g`la` hU`Y`ca` `j` cf`Zcf` Y[`]`g`Å`f`X`Y`Yg`Y`X`d`U`gg`Yf`h` `XYb`b`Y`g`h` `]b[`"]`?` cb`hU`_`h` a`][`j` Yb`][` ghj`]U`""` 5`d`fYZfYf`1/2`hY` Å`f`Y`h` gÅ[Y`_`a` Y[UX`1/2`1/2`1/2`Å`g`U`Y`Y`bh`_`Yn`Å`g` 1/2`b`Å`n`Å`g`Å`f`h`ia` Y[`_`Ö`gn`Ö`b`Å`g`Y`_`cf` `U`gnb`1/2`U`h`cg`	J`]Y`Yb`8`Ub`_`Z`Ø`f`=`f` `=`b`h`Y`f`Y`ggY`" `=`W`k` Ø`f`X`Y`a`]W`g`h`f`Ø`V`Y`f` X]Y;` Y`Y[`Yb`Y`h]h`Z`f`Yi` Yb`z`G]Y`]b`Y]b`Ya` `d`Y`f`g`Ö`b` `]W`Y`b` ;` Ygdf`ÅW`X`U`j` cb`ri` `Ø`V`f`n`Yi` [`Yb`z`X`U`gg]W`X`Y`f` [`Y]`[` b`Y`Y` ?` Ub`X]X`U`h`Z`Ø`f` `X]Y`g`Y`D`cg`h]cb`V]b`"6]h`Y`_`cb`hU`_`h]Y`f`Yb`G]Y` a`]W`d`Yf`""`
A`YX`j`Yb`][` `\\`g`Yb` <`j` U`U`cg`z`V`Å` n`Y`h`b`Y`j`Y`]ga` Y`f`Y`h`Y`b`	A`]h`Z`f`Yi` b`X`]W`Y`b`;` f`Ø`Y`b`
A`YX`j`Yb`][` `\\`g`Yb` <`j` U`U`cg`z`g`n`Å`Y`g`_`Ö`f`Y`b` `U`gnb`1/2`z`]ga` Y`f`h`V`Å` n`Y`h`	A`]h`Z`f`Yi` b`X`]W`Y`b`;` f`Ø`Y`b`
A`YX`f`Y`g`d`Y`_`h`z` <`j` U`U`cg`z`b`Ya` `i`Ö` `Y`h`f`Y`X`h`z`]ga` Y`f`h`V`Å` n`Y`h`	<`c`W`U`W`h` b[`g`c` `
A`YX`j`Yb`][` `\\`g`Yb` B`Ya` `\\]` U`U`cg`z`Ø`n`Y`h` `d`U`f`b`Y`f`Y`_`_`Ö`n`Ö`h`z`U`_`_`h`Y[`Yn` X`b`Y`_`	<`Y`f`n`]W`Y;` f`Ø`Y`