

Ghi X]YfYbXY']a '8]U`c[.': fU[Yb'Ub'=gfUY`g; YbYfU`_cbgi`]b'ØVYf'XYb'?cbZ`]_h

=gfUY`g'; YbYfU`_cbgi `]b'HU`mU'@UXcf!: fYg\Yf'gdf]W\h'a]h
Ghi X]YfYbXYb'XYf'; cYh\Y!I b]j Yfg]hAh'ØVYf'XYb
BU\cgh_cbZ]_h'i bX'8]U`c["

<]bhYf[fi bX`XYg`8]U`c[g`Ub`XYf'; cYh\Y! I b]j Yfg]hÀh</pre>

8]Y 'Øb[ghYb'9fY][b]ggY']a 'BU\Yb'CghYbž']bgVYgcbXYfY'X]Y
HYffcfUb[f]ZZY'XYf'< Ua Ug'Ui Z'=gfUY`ž'\UVYb'Ui W\'X]Y
Ghi X]YfYbXYb'XYf'; cYh\Y!I b]j Yfg]hÀh']b': fUb_Zi fh'ghUf_
VYgW\AZh][h''6Y]'j]Y`Yb'g]bX'dYfgÒb`]W\Y'JYfV]bXi b[Yb']b'X]Y
FY[]cb'gdØfVUfž'gY]'Yg'Xi fW\'ZUa]`]ÀfY'cXYf'ZfYi bXgW\UZh`]W\Y
6]bXi b[Yb'''+b'X]YgYa '?cbhYl h'ghY``h'g]W\'X]Y': fU[Yž'k]Y
U_UXYa]gW\Y'+bgh]hi h]cbYb'a]h'gc`W\Yb'Vf]gUbhYb'H\YaYb
i a[Y\Yb'i bX'kY`W\Y'Fc``Y'XYf']bhYf_i `hi fY``Y'8]U`c['gd]Y`h''

JYfgWX]YVib['XifWX'G]WXYf\Y]hgVYXYb_Yb

I fgdfØb[`]W\ k Uf ZØf 5 b ZUb['\$\delta b] Y]b; Ygdf\AW\ a]h HU`mU @UXcf!
: fYg\Yfz XYf]gfUY`]gW\Yb; YbYfU`_cbgi `]b]b A ØbW\Ybz [Yd`Ubh"
5 i Z[fi bX Y]bYf VY] XYf GhUXh Ub[YnY][hYb DfchYghj YfgUa a `i b[a i gghY X]Y; cYh\Y!I b]j Yfg]h\Ah YXcW\ X]Y J YfUbghU`hi b[UVgU[Yb" 8]Y I b]j Yfg]h\Ahg`Y]hi b['gU\ X]Y G]W\Yf\Y]h XYf
HY]`bY\a YbXYb i bX XYf; YbYfU`_cbgi `]b b]W\ha Y\f [Yk \A\f`Y]ghYh" 9fgh Ua ', " \$\delta `] _cbbhY XUg; Ygdf\AW\ bUW\[Y\c`h k YfXYbz bUW\XYa 'X]Y G]hi Uh]cb bYi 'VYk YfhYh k i fXY"

=bhYbh]cb \]bhYf XYa 8]U`c[

=a 'JcfZY`X'XYg'; YgdfÀW&g'\UVYb'Y]b][Y'Ghi X]YfYbXY'gW&f]Zh`]W& : fU[Yb'Ub'X]Y'; YbYfU`_cbgi `]b'[Yf]W&hYh''8]YgY'VYhfUZYb]bgVYgcbXYfY'X]Y'; fØbXY'ZØf']\f'; YgdfÀW&gUb[YVchi bX'X]Y 5i gk]f_i b[Yb'XYf'XUa U`][Yb'5VgU[Y''@UXcf!: fYg\Yf'ghY``hY'_`UfžXUgg'XYf'8]U`c[XUfUi Z'UVn]Y`hYž']\fY'DYfgdY_h]j Y'U`g'8]d`ca Uh]bni 'hY]`Yb'i bX'a]h'XYb'Ghi X]YfYbXYb']b'Y]bYb'5i ghUi gW&ni hfYhYb'''G]Y'VYhcbhYž'k]Y'k]W&h][Yg'gY]ž']b'Y]bYa 'g]W&YfYbFU\aYb'a]hY]bUbXYf'ni 'gdfYW&Yb''

A]ggVfUi WX 'j cb 'DfchYghYb 'ZØf'dc`]h]gWX Y 5 [YbXU

HU`mU`@UXcf!: fYg\Yf`k]Yg`XUfUi Z`\]bž`XUgg`X]Y`DfchYghY`j cf`XYf
I b]j Yfg]hÀh`cZh'j cb`Ubh]gYa]h]gW\Yb`F YggYbh]a Ybhg`[YdfÀ[h`g]bX"
G]Y`_f]h]g]YfhYž`XUgg`VY]`gc`W\Yb`J YfUbghU`hi b[Yb`\Ài Z][`_Y]bY
j Yf`Àgg`]W\Yb`\DZcfa Uh]cbYb`j YfVfY]hYh`k YfXYb`i bX`ghUhhXYggYb
: U`gW\]bZcfa Uh]cbYb`_i fg]YfYb"`6YgcbXYfg`j Yfk]Yg`g]Y`Ui Z`XYb
J cfZU```fi bX`i a `X]Y`9I d`cg]cb`Ua `5`!5\`]!?fUb_Yb\Ui g`Ua `%+"
C_hcVYf`&\$&' ž`k c`X]Y`6Yf]W\hY`ØVYf`X]Y`I fgUW\Y`ghUf_`j Uf]]YfYb"
8]Yg`nY][hž`k]Y`k]W\h][`Yg`]ghž`g]W\`Ui Z`: U_hYb`ni `ghØhnYbž`i a
A]ggj YfghÀbXb]ggY`ni `j Yfa Y]XYb"

K]ggYbgWX UZh`]WX Yf'5i ghUi gWX 'U`g']bhY[fU`Yf 6YghUbXhY]`'XYf'6Yn]Y\i b[Yb

@UXcf!: $fYgYfAi \gg YfhY g]WX VYgcf[h@VYfXUg.9fghUf_Yb.XYf.68G!$ 6Yk Y[i b[\check{z} X]Y Y]bYb.5VVfi WX.XYg.k]ggYbgWX UZh]WX Yb 5i ghUi gWX Yg.a]h=gfUY.ZcfXYfh"G]Y.VYhcbhY.X]Y.6YXYi hi b[\dot{z} X]YgYf Ni gUa a YbUfVY]hZØfX]Y.XYi hgWX!]gfUY.]gWXYb.6Yn]Y\i b[Yb.i bX X]Y.k Y.hk Y]hY.N]j].[YgY.gWX UZh".9]b.6Y]gd]Y.ZØfY]bYb YfZc.[fY]WXYb.5i ghUi gWX.]gh:XUg.bYi [Y[fØbXYhY : fUb_Z fh!HY.5j]j .7YbhYf.Zcf.h\Y.Ghi Xm.cZ.FY.][]ci g.UbX. \Rightarrow hYffY.][]ci g.8 mbUa]Wg \check{z} XUg.X]Y.FY.][]cbgk]ggYbgWXUZhYb.VYfY]WX.Yfh"

8]YJYfUbhk cfhi b[XYf < cWxgWxi Yb

8]Y'<cW\gW\i`fY_hcfYb_cbZYfYbn'\Uh'g]W\'_`Uf'nif' = F5!8YZ]b]h]cb

j cb '5bh]gYa]h]ga i g'VY_Ubbhž'i bX'X]YgYf'6YgW\`i gg'gc``
g]W\YfghY``Ybž'XUgg'l b]j Yfg]h\hYb'XYa '8fi W_ž'XYb'5i ghUi gW\'ni
VYYbXYbž'b]W\h'bUW\[YVYb"'9]b'gc`W\Yf'5VVfi W\'k \hYf'f]g_Ubh
i bX'bUW\hY]`]['ZØf'U``Y'6YhY]`][hYb'i bX'ZØ\fYb'ni 'Y]bYa 'J Yf`i gh
Zi bX]YfhYf'k]ggYbgW\UZh`]W\Yf'8]g_i gg]cbYb"

GWX`i ggZc`[Yfi b[Yb`ZØf`X]Y`Ni _i bZh

8 Yf '8]U`c[žk]Y 'Yf 'Ub 'XYf'; cYh\Y!I b]j Yfg]hÀh 'Ub[YghfYVh'k]fXž _ObbhY 'Y]b 'GW\f]hh']b 'F]W\hi b['Y]bYg 'VYggYfYb'J YfghÀbXb]ggYg nk]gW\Yb'?i `hi fYb'gY]b" 8 cW\k |Y 'Ui g'XYb'5i ggU[Yb'XYf; YbYfU`_cbgi`]b'\Yfj cf[Y\hž']gh'gc`W\Y]b'5i ghUi gW\'bi f'a Ò[`]W\ž\k Ybb'U``Y'6YhY]`][hYb'VYfY]h'g]bXž'j cfi fhY]`gZfY]'ni ni \OfYb"'8 Ug U_hi Y``Y'?`]a U'XYf'GdU`hi b['V`c» ni ghY``Yb'i bX'_cbghfi _h]j Y; YgdfÀW\Y'ni 'ZOfXYfbž'_ObbhY'b]W\h'bi f'XYf'U_UXYa]gW\Yb; Ya Y]bgW\UZhž'gcbXYfb'Ui W\'XYf'; YgY``gW\UZh']bg[YgUa h ni [i hY_ca a Yb"

8 | Y :: fU[Y b 'ghY ``hY b '5 b hc b | U 'GhY | b g 'i b X 'A U `hY '6 `U \ U"

B 5;

8 YhU1`a

6 Y gi W Y b 'G] Y 'i b g 'U i Z 'X] Y ! b U W f] W h Y b "b Y h