

6UXYdUf_'K Ofh\'YfOZZbYh.'6Ygi W\Yf ghfOa Yb'hfchn'GhUXhfUhgUVgU[Y°

8 Yf '6 UXYd Uf_'K Ofh\ '\ Uh 'Ua '7 \f]gh]' <]a a Y `ZU\fh'[Y OZZbYh/XYf 'GhUXhf Uh 'Y\bhY 'XUg'; Ub n 'U\fYgV UX 'UV "'6 Y gi W\Yfghf ca q]W\YfY 'bYi Y '6 UXYc fXbi b["



6UXYdUf_'K Ofh\z'?Uf`gfi\Yz'8Yi hgW\`UbX'!'8Yf'6UXYdUf_']b K Ofh\z'?Uf`gfi\Yz'Yf`YVhY'Y]b'i bYfk UfhYhYg'7ca YVUW_z'bUW\XYa Yf'Ua '7\f]gh]'<]a a Y`ZU\fhghU['gY]bY'HØfYb'k]YXYf'[YOZZbYh'\Uh'' 5b'X]YgYa '9fOZZbi b[ghU['\]Y`hYb'g]W\'X]Y'6Ygi W\YfnU\`Yb ni bAW\gh']b'; fYbnYbz'XcW\']b'XYb'HU[Yb'XUbUW\'ghfOa hYb nU\`fY]W\Y'6UXY[AghY']b'X]Y'5b`U[Yb''8Ug'VYghAh][hz'k]Y'gY\f'XYf 6UXYdUf_'j cb'XYf'6Yj O`_Yfi b['[YgW\Ahnh'k]fX''

 $8]Y F ØW __Y f XYg 6 UXYd Uf _g k]f X VYg c b XYf g j c b ``c _U`Yb 6 Yg i W Yf b k]Y ?`U i X]U ; i W _Yf h i b X GhY j Y K]Y XYf a Ubb '[YZY]Yf h '' 5 i Z[f i b X Y]b Yf b Y i Yb '6 UXY c f X b i b ['[]V h Yg 'ZØf 'X]Y '6 Yg i W Yf 'UV g c Z c f h 'U i W 'Y]b][Y 'Ÿ b XYf i b [Yb ž X]Y 'b Øhn`]W Y '\ \dag Z c f a Uh]c b Yb 'ZØf Y]b Yb hg d Ubb h Yb '5 i Z Ybh \ U`h 'V]Yh Yb 'g c ``Yb "$

5VgU[Y'ZØf'; Ubn'U\fYgVUX

2 _cbca]gWX Y < YfUi gZcfXYfi b[Yb i bX 9bhk]W_ i b[Yb</pre>

 $\label{thm:chn:xyf:yfZfYi:} WYb'6Ygi WYgnUYb'gYYb'g]WY'j]Y'Y'6AXYf'a]h ghY][YbXYb'?cghYb'_cbZfcbh]Yfh'''6Y]gd]Y`gk Y]gY'`]Y[Yb'X]Y Xi fWXgWXb]hh`]WYb'?cghYb'ZØf'Y]b'< U``YbVUX'a]h`GdcfhZi b_h]cb <math display="block">VY]'`\%Z\%+) 'A]``]cbYb'9i fc'i bX'ZØf': fY]nY]h!'gck]Y'HYfa U`VAXYf gc[Uf'VY]'(Z&A)``]cbYb'9i fc''8]Yg'YUh'j]Y`Y'6YhfY]VYf'XUni j YfUb`UgghZ'GhfUhY[]Yb'ni f'GYb_i b['XYg'9bYf[]Yj YfVfUi WYg'ni Ybhk]\w_Y`bZ'X]Y'VYfY]hg'YfghY'9fZc`[Y'nY][Yb''=a 'JYf[`Y]WY'ni &$\%-'k i fXY'Y]bY'FYXi n]Yfi b['VY]a '6Yni ['j cb'K Àfa Y'i bX Y`Y_hf]gWXYf'9bYf[]Y'ZYgh[YghY``h'' \end{align*}$

8]Y'9f[YVb]ggY'XYf'8; ZX6!I a ZfU[Y'VY`Y[Yb'b]W\h'bif'X]Y 6Y`]YVh\Y]h'XYf'6ÀXYfž'gcbXYfb'Ui W\'X]Y'<YfUi gZcfXYfi b[Ybž'a]h XYbYb'X]Y'6YhfY]VYf'_cbZfcbh]Yfh'g]bX"'9]b'XYhU]``]YfhYf'8; ZX6! FYdcfhž'XYf'X]YgY'+bZcfa Uh]cbYb'j Yfh]YZhž'k]fX']b'XYb _ca a YbXYb`K cW\Yb`Yfk UfhYh" \= `X]YgYa `6Yf]W\h`gc``Yb`Ui W\Yfgha U`g`8UhYb`ni f`5i ZgW\`ØggY`i b[`XYf`6Ygi W\Y`bUW\ j YfqW\]YXYbYb`; fi ddYb`j YfÒZZYbh`]W\h`k YfXYb"

Ni gUa a YbZUggYbX`nY][hˈg]W\ž'XUgg`XYf`6UXYdUf_`]b`K Òfh\`Y]bYb k]W\h][Yb`6Y]hfU['ni f': fY]nY]h[YghU`hi b[']b`XYf`FY[]cb``Y]ghYhi bX g]W\fYg]`]Ybh`[Y[YbØVYf`XYb`U_hi Y``Yb`< YfUi gZcfXYfi b[Yb`nY][h" 8 Yf`dcg]h]j Y`HfYbX`XYf`6Ygi W\YfnU\`Yb`_ÒbbhY`Ui W\`ZØf`X]Y Ni _i bZh`XYf`GW\k]a a VUX`UbXgW\UZh`]b`8 Yi hgW\`UbX`j cb 6YXYi hi b['gY]bž'k]Y`Ui W\``j WJ U"Wca `Uba Yf_h"

8 YhU]`g	
Cfh	6UXYdUf_'K Ofh\zi'?Uf`gfi\Yz'8Yi hgWX`UbX
EiY``Yb	k k k "f\Y]bdZU`n"XY
	• kkk"`jWjU"Wca
	• k k k "X[ZX V "X Y

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