

@i]g`7ccfXYg.`9l!Gh"`DUi`]`DfcZ]`a i gg bYiYb`JYfY]b`giW\Yb°

@]g`7ccfXYgž'9l!Gh"`DUi`]!DfcZ]ž'k]fX`VY]`9]bhfUW\h BcfXYfghYXh'Ui ggcfh]Yfh'i bX'gi W\h'bUW\'Y]bYa 'bYi Yb JYfY]b"



Gh'DUi `]ž8Yi hgWX `UbX'!' \D'Y]bYf'ØVYffUgWXYbXYb'K YbXi b[
a ØggYb'X]Y': i » VU``ZUbg']b' < Ua Vi f['j cb'@']g'7ccfXYg'5VgWX]YX
bY\a Yb"'8Yf'Y\Ya U`][Y'Gd]Y`Yf'XYg': 7'Gh"'DUi `]'\Uh'X]Y'V]hhYfY
BUWXf]WXh'Yf\U`hYbž'XUgg'Yf'b]WXh'`Àb[Yf'VY]'9]bhfUWXh
BcfXYfghYXh'Y]b[Yd`Ubh']gh"'BUWX'bi f'Y]bYa '\J\f']a 'JYfY]b'g]Y\h
g]WX'XYf'&*!'À\f][Y': `Ø[Y`gd]Y`Yf'bi b'[Ynk i b[Ybž'Y]bYb'bYi Yb
?`i V'ni 'Z]bXYbž'k]Y'Gh"'DUi `]'&('VYf]WXhYh"

 $\label{thm:continuous} \begin{tabular}{ll} 7ccfXYgž'XYf']b'XYf'`YhnhYb'GU]gcb'Ui Z[fibX'a Y\fYfYf JYf`Yhnib[Yb'bif'%' '9]bgÅhnY'\UhhYž'_cbbhY'hfchn'gY]bYf Y]bgh][Yb'<cZZbib[Yb']b'BcfXYfghYXh'b]W\h': i > 'ZUggYb'''9]bgh k YW\gY`hY'Yf'j cb'Gh''DUi `]'nif'[&' 'XYg'JZ6'Ghihh[Ufhž'k c'Yf']bgY]bYf'YfghYb'GU]gcb''\&'Gd]Y`Y']b'XYf'FY[]cbU``][U'BcfX \\ \end{tabular}$

VYghf]hhYb`\Uh"8Yf'K YW\gY`'YfZc`[hY'XUa U`gž'k Y]`'X]Y
9bhk]\W_`i b['XYg'hU`Ybh]YfhYb'5i »Ybgd]Y`Yfg'b]\W\h'XYb
9fk Ufhi b[Yb'XYg'J YfY]bg'YbhgdfUW\ž'gc'Gdcfh\W\YZ'5bXfYUg
6cfbYa Ubb"'7ccfXYg'gY`Vgh'bU\a 'X]Y'<YfUi gZcfXYfi b['Ub'i bX
gU\'g]Y'U`g'bYi Y'7\Ub\W'ž'g]\W\'ni 'VYk Y]gYbž'k]Y'\HfUbgZYfa Uf_h
VYf]\W\hYh"

JYf`Yhni b[gdfcV`Ya Uh]_']a ': c_i g

8]Y?Uff]YfYjcb'4b[Yb'HUYYbhYb'k]Y'7ccfXYg'k]fX'cZhXifW
JYfYhnib[Yb'VYY]bhfÀW\h][h"'9]bY'U_hiY'YGhiX]Y'jcb'XYf'@YYXg!
6YW_Yhh!Ib]jYfg]hÀh']b'9b['UbX'VYY[hz'XUgg'DfcZ]Z]*VU'Yf
VYgcbXYfg'\ÀiZ]['JYfYhnib[Yb'YfY]XYb"'AY\f'U'g'(+\$
JYfYhnib[Yb'kifXYb'ibhYf'&(\$'Gd]Y'Yfb']b'Y]bYf'GU]gcb
Xc_iaYbh]Yfh''Y]bY'VYgcf[b]gYffY[YbXY'NU\'"'XYYf'Gd]Y'Yf'kUf
XifW\gW\b]hh']W\'nkY]'AU''dfc'GU]gcb'jYf'Yhnhz'kUg'Y]bYb'5bgh]Y[
jcb'(\$'DfcnYbh']a'JYf['Y]W\'ni'Y]bYf'À\b']W\Yb'IbhYfgiW\ib[']a
\Lambda\f'\&\\$\%'XUfghY'\h''6YgcbXYfg']a'8YnYaVYf'ibX'\Lambda\f'g\bX']bY'YGd]Y'Y'XifW\'X]Y'\c\Y'6Y`Ughib['jYfX]W\hYh'g]bXz'g]bX'j]Y'Y
Gd]Y'Y'XifW\'X]Y'\c\Y'6Y`Ughib['jYfX]W\hYh'g]bXz'g]bX'j]Y'Y
Gd]Y'Yf'VYhfcZZYb'''Aig_i'AfY'DfcV'YaYz'gdYn]Y\'']a
CVYfgW\Yb_Y'z'[Y\OfYb'ni'XYb'\\AiZ][ghYb'JYf\Yhnib[Ybz'k]Y'
8YihgW\'UbXZib_'Yf\'AihYfh''

8 Yf'a cXYfbY: i » VU```ghY``h'\c\Y'5bZcfXYfi b[Yb'Ub'X]Y; Y`Yb_Y i bX'A i g_i `Uhi f'XYf'Gd]Y`Yfž'k Ug'XUg'F]g]_c'j cb'J Yf`Yhni b[Yb b]W\h'bi f'VY]'À`hYfYb'DfcZ]gž'gcbXYfb'Ui W\']b'XYb'* [YbX_`UggYb Yf\O\h''K c`Z[Ub['Dchh\Ugh'ZcfXYfh'XU\Yf'I bhYfgi W\i b[Yb'ni f J Yf`Yhni b[gdfÀj Ybh]cb']b'XYb'BUW\k i W\g!@Y]ghi b[gnYbhfYb'XYf 6i bXYg`][]ghYbž'i a 'Y]bY'VYggYfY'; Ygi bX\Y]hgj Yfgcf[i b['ZØf'X]Y 5h\`YhYb'g]W\Yfni ghY``Yb"

: Øf`7ccfXYg`V`Y]Vh`Yhnhini `\cZZYbž`XUgg`g]W\`VU`X`Y]bY`bYi Y
A Ò[`]W_Y]h`V]YhYhž`XYbb`a]h`Y]bYa '@ÀbXYfgd]Y``ZØf`X]Y
8ca]b]_Ub]gW\Y`FYdi V`]_`]a `FØW_Yb`\Uh`Yf`XUg`DchYbn]U`ž`VY]
Y]bYa `UbXYfYb`JYfY]b`bYi `Xi fW\ni ghUfhYb"`8]Y`gdcfh`]W\Y
@Ui ZVU\b`_Ubb`a UbW\a U``k]Y`Y]bY`6Yf[!'i bX`HU`ZU\fh`gY]bž`UVYf
a]h`XYa `f]W\h][Yb`<ÀbXW\Yb`_ObbhY`XYf`\f\b[Y`5b[f]ZZggd]Y`Yf
XcW\`bcW\`X]Y`?i fj Y`_f]Y[Yb"

8 Y hU]`g	
Cfh	Gh'DUi`]ž'8 Yi hgWX`Ub X
EiY``Yb	• ghdUi `]&("a cdc"XY
	k k k "hfUbgZYfa Uf_h"XY
	• kkk"XYihgWX`UbXZib_"XY

6Ygi WXYb G]Y i bg Ui Z bU[!\Ua Vi f["XY