8 YUb Y '6 cn Ya Ub 'G W Cc `K Y `Wca Yg '5 i gh]b @UUhg W `Ug B Yk '6 Ug_YhV U `` '7 c U W \

8 Y U b Y '6 c n Y a U b 'G W \ c c ``U d d c] b hg '5 i gh] b '@U U hg W 'U g '\ Y U X V U g _ Y h V U ``` W c U W ž 'U] a] b ['Z c f '[f c k h \ 'U b X 'h Y U a k c f _ '] b '6 U m 7 c i b hm 'g d c f hg "



Hca a m'C`]j Yf'GhUX]i a ž'DUbUa U'7]hmž: @ž'I G5'!'9| W]h]b[
WXUb[Yg'UfY'VfYk]b['Uh'8YUbY'6cnYa Ub'GWXcc`'Ug'h\Y
]bgh]hi h]cb'k Y`Wca Yg'5i gh]b'@UUhgWX'Ug'h\Y'bYk'\YUX'Vcmg
VUg_YhVU``'WcUWX"'@UUhgWXž'k\c'\Ug'U'gc`]X'VUW_[fci bX']b
VUg_YhVU``'WcUWX]b['UbX'U'dUgg]cb'Zcf'd`UmYf'XYj Y`cda Ybhž
fYd`UWYg'A Uhh'; fUbj]``Yž'k\c'WcbWi XYX'\]g'g]I !gYUgcb'hYbi fY
k]h\'Ub']a dfYgg]j Y'fYWcfX'cZ', %!(\$"'@UUhgWX g'Uddc]bha Ybhž
Ubbci bWYX'cb'\$ bY'-ž'&\$&) ž'\Ug'gdUf_YX'Ybh\i g]Uga 'Ua cb[
d`UmYfg'UbX'gi ddcfh]j Y'ZUbg'U`]_Y"

Df]bW]dU``\delig Ub`6YUW\`YIdfYggYX`\]g`cdh]a]ga`UVcih`@UUhgW\ ghYdd]b[`]bhc`h\]g`d]jchU``fc`Y"'<Y`bchYXž'5igh]bg`XYX]WUh]cb`hc d`UmYf`XYjY`cdaYbh`]g`WcaaYbXUV`Y"\delig XYYXž'@UUhgW\`]g`gYh`hc $\label{thm:condition} $$ YghUV`]g\ `U`W``hi fY`cZ'[fck h\ž'UWWci bhUV]`]hmž'UbX`hYUa k cf_k]h\]b`h\Y`dfc[fUa "`<]g`YI dYf]YbWY`Uh`\JW_gcb`DfYdUfUhcfm $$ GW\cc``UbX`6Um`<][\`GW\cc``Ybgi fYg`\Y`Vf]b[g`U`k YU`h\`cZ_bck `YX[Yž'k\]W\`5h\`Yh]W8]fYWhcf`5bXfYk `<U`ZcfX`fYWc[b]nYg Ug`_Ym`hc`ghi XYbh!Uh\`YhY`gi WWYgg"$

$H\Y DUh\ 5\YUX$

5g'@UUhgW\[YUfg'id'hc'a YYh'h\Y'd`UmYfg'h\]g'k YY_ž'\Y'U]a g'hc]bgh]```U'fYbYk YX'Wca a]ha Ybh'hc'X]gW]d`]bYž'YZZcfhž'UbX']bhY[f]hm' < Uj]b['d`UmYX'Uh'GdU]b'DUf_'<][\'GW\cc``UbX'`UhYf'Uh'8Y`hU'GhUhY |b]j Yfg]hm'UbX'h\Y'I b]j Yfg]hm'cZ'A cbhYj U``cž'\Y'UddfcUW\Yg WcUW\]b['bch'f\gh'Ug'U'^cVž'Vi h'Ug'U'k Um'hc'a c`X'mci b['`]j Yg h\fci [\'gdcfh"

H\Y'fYWYbh'cbY!XUm'mcih\'ZcchVU```WUad'Uh'Hcaam'C`]jYfGhUX]ia']b'DUbUaU'7]hm']g'U'hYghUaYbh'hc'h\Y'j]VfUbh'gdcfhgW'hifY'k]h\]b'h\Y'Wcaaib]hmž\][\`][\`][\hYX'Vm'h\Y'fYaUf_UV`YdfYgYbWY'cZ'ZcfaYf'Fih\YfZcfX'UbX':GIghUf'*Jj]Yb'9``]ch"'9jYbhg`]_Y'h\YgY'fYZYWh\ck'WfiW]U``gdcfhg'UWh]j]h]Yg'UfY']b'ZcghYf]b[Wcaaib]hm'gd]f]h'UbX'\YU`h\m'Yb[U[YaYbh'Uacb['h\Y'mcih\žaiW\']_Y'@UUhgW\g'idWca]b['WcUW\]b['^cifbYm'

$H \setminus f = h \setminus$

6YmcbX:VUg_YhVU``ž:8YUbY:6cnYa Ub'GW.cc``VcUghg'U'j Uf]Yhm'cZYI hfUW'ff]W'`Uf'UWh]j]h]Yg"'H\Y]f'dfc[fUa gž'fUb[]b['Zfca 'h\YBUh]cbU``<cbcf'GcW]Yhm'hc'h\Y']a dfYgg]j Y'6UbX'Dfc[fUa ž'Yb[U[YcjYf'&\$\$'ghi XYbhg'UbX'UfY'bchYX'Zcf'fYWY]j]b['UWWc`UXYg'g]bWYh\Y'gW.cc`g']bWYdh]cb']b'&\$\$\$"'H\Y'6UbX'Dfc[fUa '\Ug'a UXY'UbUa Y'Zcf']hgY`Zž'YUfb]b['h\Y':`cf]XU'6UbXa UghYfg'5ggcW]Uh]cb gChhc'>"'?fUi g\UUf'5k UfX'UbX'VY]b['XYg][bUhYX'U'; F5A A M5k UfXG][bUhi fY'GW.cc`']b'&\$%)"

=bj c`j Ya Ybh']b'gi W\'UWh]j]h]Yg']g'Wfi W]U`hc'ghi XYbh'XYj Y`cda Ybh"
5\W\cfX]b['hc'h\Y'BUh]cbU`': YXYfUh]cb'cZ'GhUhY'<][\'GW\cc`
5ggcW]Uh]cbg'fB: < GŁž'\][\'g\W\cc`'U\Wh]j]hm'dfc[fUa g'ZcghYf'df]XY
]b'g\W\cc`g'UbX'\\can a i b]h]Ygž'hYU\\]b[']a dcfhUbh'g_]``g'`]_Y</pre>

hYUakcf_'UbX'gY`ZIX]gW]d`]bY"'DUfh]W]dUh]cb'Wcbhf]VihYgg][b]ZJWUbh`m'hc'VYhhYf'UWUXYa]WdYfZcfaUbWYž'YIYad`]Zm]b['\ckUWUXYa]Wa]gg]cbg'UbX'Wc!W'ff]W'`Uf'UWh]j]h]Yg'[c'\UbX']b'\UbX"GW\cc`g'k]h\'fcVigh'YIhfUW'ff]W'`Uf'cZZYf]b[g'cZhYb'gYY']adfcjYXUhYYbXUbWY'UbX'`ckYf'Xfcdcih'fUhYg"

@cc_]b[Hck UfXg h\Y : i hi fY

@UUhgW\ g'j]g]cb'Zcf'h\Y'VUg_YhVU``'hYUa 'U`][bg'k]h\'h\YgY VfcUXYf'YXi WUh]cbU``VYbYZ]hg'''6m']bgh]``]b['j U`i Yg'h\fci [\'gdcfhgž @UUhgW\'k]``\Y`d'ghi XYbhg'W'`h]j UhY'Wf]h]WU``g_]``g'h\Uh'YI hYbX VYmcbX'h\Y'VUg_YhVU``'Wci fh'''H\Y'B: <G'\][\`][\hg'\ck dUfh]W]dUh]cb']b'\][\'gW\cc`'UWh]j]h]Yg']g'`]b_YX'hc'dcg]h]j Y'dcgh!\][\'gW\cc`'ci hWca Ygžgi W\'Ug'\][\YffUhYg'cZ'Wc``Y[Y UhhYbXUbWY'UbX'W]j]WYb[U[Ya Ybh'

5g:8YUbY:6cnYa Ub:GWkcc`Ya VUf_gcb:h\]gbYk:WkUdhYfžth\Y Wca a i b]hm:WUb:`cc_:Zcfk UfX:hc:k]hbYgg]b[:bch:'1 gh:U:VUg_YhVU``hYUa:]b:UWh]cbž'Vi h:U:h\f]j]b[:dfc[fUa:h\Uh:Wcbhf]Vi hYg:hc:h\Y XYj Y`cda Ybh:cZ`\YU`h\mž'Yb[U[YX:W]h]nYbg":H\YfY g:gca Yh\]b[:hc VY:gU]X:Zcf:h\Y:dck Yf:cZ:gdcfhg:UbX:UWh]j]h]Yg:]b:g\Ud]b[:k Y``! fci bXYX:]bX]j]Xi U`g gca Yh\]b[:@UUhgWk:]g:dc]gYX:hc:WkUa d]cb Ug:\Y:hU_Yq:h\Y:fY]bq"

 $: cf'i \ dXUhYg'cb'@UUhgWX g'^ci \ fbYm'UbX'ch\Yf'UWh]j \]h]Ygž']bhYfYghYX dUfh]Yg'WUb'WXYW_'ci h'h\Y'gWXcc` g'UWh]j \]h]Yg'dU[Y'\YfYž'cf'fYUX a cfY'cb'h\Y'WUgY'Zcf'\][\'gWXcc`'UWh]j \]h]Yg'Vm'j \]g]h]b['B: < G''$

8 YhU]`g	
Cfh	Hca a m˙C`]j Yf˙GhUX]i a ž˙DUbUa U˙7]hmž˙: @ž
	I G5
EiY``Yb	kkk"bYkg\YfU`X"Wca
	VcnYa UbVi W_g"bYh
	• k k k "b Z\ g"cf[

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'a Y]b!k]Yb "bYh