< UfXYY'7ci bhm'GWcfYg' %\$'A]``]cb'Zcf A cXYfb'; cj Yfba Ybh'7ca d`Yl °</pre>



K Ui Wki `Už: `cf]XUžI G5 !! ⇒ `U'g][b]Z]WUbh'ghf]XY hck UfXg i d`]Zh]b[``cWU`[cj YfbUbW'ž' < UfXYY '7 ci bhm']g'gYh'hc'fYWY]j Y'U gi VghUbh]U``Vccgh'k]h\ `U'` %\$ 'a]``]cb 'U``cWUh]cb 'Zcf'U'bYk Wci fh\ci gY'gYfj]WYg'Wca d`YI "'H\]g'Zi bX]b['k Ug'WcbZ]fa YX'Xi f]b[U'fYWYbh'Vi X[Yh'U[fYYa Ybh'VYhk YYb'h\Y': `cf]XU' < ci gY'UbX GYbUhY"'GYbUhY 'DfYg]XYbh'6Yb'5`Vf]hhcbž'\U]`]b['Zfca 'K Ui Wki `Už cf][]bU``m'gci [\h'U'\YZhm' &\$ 'a]``]cb 'Vi h'gYhh`YX'Zcf'h\Y'UWWYdhYX Ua ci bhž'k \]Wk 'a Uf_g'U'j]hU``]bj Ygha Ybh']b'h\Y'Wca a i b]hm g]bZfUghfi Whi fY'UbX'gYfj]WY'UWWYgg]V]`]hm"

H\Y`bYk`Wcad`YI`U]ag`hc`WYbhfU`]nY`hYb`YggYbh]U``WcibhmgYfj]WYgž']bWiX]b[`h\Y`Wcifh\cigYž'ghUhY`dfcVUh]cbž'UbX`diV`]WXYZYbXYfg`cZZ]WYgž'U```cZ'k\]W\`UfY`W'ffYbh`m`\cigYX`]b`ZUW]`]h]Yg

cj Yf'*\$'mYUfg'c`X"'H\YgY'ci hXUhYX'Vi]`X]b[g'bch'cb`m'dcgY
UWWYgg]V]`]hm'WXU``Yb[Yg'Vi h'U`gc'ZU]``hc'a YYh'a cXYfb'Z]fY'gUZYhm
WcXYg"'H\]g'dfc'YWh'k]``'VY'XYj Y`cdYX'cb'Wci bhm!ck bYX'dfcdYfhm
g]hi UhYX'bYUf'YI]gh]b['cZZ]WYg'UbX'h\Y'9a Yf[YbWm'CdYfUh]cbg
7YbhYfž'Ybgi f]b['U'ghfUhY[]W`cWUh]cb'Zcf'Yb\UbWYX'gYfj]WY
YZZ]W]YbWm'': cf'a cfY'XYhU]`g'cb'h\Y'Z bX]b['U[fYYa Ybhž': `cf]XU
Dc`]h]Wg'fYdcfhg'h\Uh'h\Y'U``cWUhYX'Z bXg'k]``'Wcj Yf'YggYbh]U`
Wcghg'`]_Y'Yb[]bYYf]b['UbX'UfWX]hYWhi fY'd`Ubgž'WcbhfUWhcf'\]f]b['z
UbX'dYfa]hh]b["

HUf[Yh]b['FifU`'7\U``Yb[Yg

H\]grZi bX]b['Wca YgrUa]XghrVfcUXYfrYZZcfhgrhcrfYj]hU`]nYrfi fU` Wca a i b]h]YgrUWfcggr: `cf]XU"'5`Vf]hhcbrfYWYbh'm'i bj Y]`YXrh\Y: `cf]XU"Fi fU``FYbU]ggUbWYrDUW_U[Yžrk\]WXrUgd]fYgrhcrfYU``cWUhY`%-+a]``]cbrhcrYb\UbWYr]bZfUghfi Whi fYrUbXrgYfj]WYgr]b\]ghcf]WU``m'i bXYfgYfj YXrUfYUg"'Gca Yr~++a]``]cbr]grYUfa Uf_YXhcrgdYW]Z]WU``m'gi ddcfhrgdUfgY`m'dcdi `UhYXr`cWU`YgžrUXXfYgg]b['UghUf_rfYU`]hm : `cf]XU grfi fU``dcj YfhmrfUhYrg]hgr[f]a `m'Uhr&\$i žrUZUfrWfmrZfca h\Yr%'i rfUhYrgYYbr]bri fVUbrWybhYfgžrUWWcfX]b[hcXUhUrZfca h\Yr%'i rfUhYrgYYbr]bri fVUbrWybhYfgžrUWWcfX]b[hcXUhUrZfca h\Yr5a Yf]WUbr7ca a i b]hmrGi fj Ym"'H\]grX]gdUf]hmr\UgZi Y`YXrh\YrbYYXrZcfrZcWigYXr`Y[]g`Uh]j YrUWh]cb"

 $GYbUhcf'7cfYm'G]a~cb']g'Uh'h\Y'\Y`a~cZ'h\]g']b]h]Uh]j~Y'Ug'\Y di~g\Yg'Zcf'Zi~fh\Yf']a~dfcj~Ya~Ybhgž'k~]h\'``~%%$`a~]``]cb'XYj~chYX'hc~fi~fU`'fcUX'Yb\UbW'a~Ybhgž''~(~,~a~]``]cb'Zcf'UZZcfXUV`Y'\ci~g]b[~ž~UbX'cj~Yf''~,~$`a~]``]cb'gYh'hc'Ua~d`]Zm'UVWYgg'hc'a~YX]WU``fYgci~fW'g~]b'fi~fU``hYff]hcf]Yg'''5`Vf]hhcb'Ya~d\Ug]nYg'h\Uh'YZZYWh]j~Y~]bZfUghfi~Whi~fY']g'Wfi~W]U``hc'ZUW]`]hUhY'[~fck~h\'UbX'gi~ghU]bUV]`]hm~k~]h\]b'h\YgY'Wca~a~i~b]h]Yg''':~cf'a~cfY'WcbhYl~h'cb'h\]g'`Y[~]g`Uh]j~Y~dUW_U[~Yž'j~]g]h'K~:~Gl~B~Yk~g''$

=b| Ygh]b[]b h\Y : i hi fY

9Uf`]Yfž; cj Yfbcf'Fcb'8YGUbh]g'i bXYfgWcfYX'\]g'Wca a]ha Ybh'hc ghfYb[h\Yb]b[': `cf]XU g'fi fU`'YWcbca m'Vm'Ubbci bW]b['' &\$ a]``]cb']b'Uk UfXg'h\fci [\'h\Y'Fi fU`'=bZfUghfi Whi fY': i bX"'H\YgY Zi bXg'k]```UZZYWh'%+ 'Wca a i b]h]Ygž'U``ck]b['h\Ya 'hc'i bXYfhU_Y

H\Y`k]XYgdfYUX`gi ddcfh`Zcf`fi fU``Yb\UbWa Ybhg`Wci`X`dfcj Y
YggYbh]U``Ug`: `cf]XU`Wcbh]bi Yg`hc`YI dYf]YbWY`g\]Zh]b[
XYa c[fUd\]WhfYbXg"`K]h\`Y][\h`Wci bh]Yg`k]hbYgg]b[`dcdi`Uh]cb
XYW]bYg`]b`h\Y``Ugh`XYWUXYž`]h g`WYUf`h\Uh`k]h\ci h`ghfUhY[]W
]bj Ygha Ybhgž'h\YgY`UfYUg`a Um`ghfi [[`Y`hc`fYWcj Yf"`Hc`fYUX`a cfY
UVci h`h\Y`Zi bX]b[`Uk UfXYX`hc`j Uf]ci g`Wca a i b]h]Ygž'W\YW_`ci h
h\Y`Ubbci bWYa Ybh`cb`h\Y`: `cf]XU; cj Yfbcf g`g]hY`Uh`: `cf]XU
; cj Yfbcf"

 $\label{lem:hammodic} $$H\Y`cb[c]b['YZZcfhg'YbWUdgi`UhYX']b'Vch\'h\Y'<UfXYY'7cibhm dfc YWh'UbX'h\Y'VfcUXYf'fi fU`'dUW_U[Y']``i ghfUhY'Ub']a dcfhUbh Wcaa]ha Ybh'hc'ZcghYf]b['Yei]hUV`Y'[fck h\"'6m'UXXfYgg]b['h\Y bYYXg'cZ'cjYf`cc_YX'Wcaaib]h]Ygž': `cf]XU g'`UkaU_Yfg'UfY hU_]b['g][b]Z]WUbh'ghYdg'hck UfXg'Ybgif]b['h\Uh'bc'cbY']g'`YZh VY\]bX']b'h\Y'eiYgh'Zcf'U'Vf][\hYf'ZihifY''$

8YhU]`g	
Cfh	K Ui Wi `Už': `cf]XUž'I G5
EiY``Yb	Z`cf]XUdc`]h]Wg"Wca
	bYk g"k Zgi "cf[
	• k k k "Z`[cj "Wca

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