



@Ycb 7ci bhmž: `cf]XUžI G5 !! H\Y gdcfhg Wca a i b]hm Uh: `cf]XU 5/ A I b]j Yfg]hm]g fYY`]b['UZhYf h\Y 'UffYgh c Z 5b[Y`U Gi [[gž h\ Y Uh\ `Yh]WX]fYWhcfž Zcf 'U``Y[YX`m ghY U`]b['cj Yf'` &(ž\$\$\$ Zfca '\Yf dfYj]ci g Ya d`cmYfž h\Y: `cf]XU Gdcfhg: ci bXUh]cb " Gi [[g hi fbYX\YfgY`Z]b cb A cbXUm Uh h\Y @Ycb 7ci bhm J]` UbX bck ZUWYg a i `h]d`Y 'W Uf[Yg]bWi X]b['ZY`cbm [fUbX h\YZh UbX 'U gW Ya Y hc XYZfUi X" G\Y \Ug U`gc 'VYYb \]hik]h\ 'Zci f a]gXYa YUbcf Wci bhg fY`UhYX hc 'ZU`gY WU]a g cb hfUj Y`j ci W\Yfgž gh]ff]b['WcbW fb Ua cb['ghUZZ'UbX 'gi ddcfhYfg U`]_Y 'UVci h'h\Y a UbU[Ya Ybh cZ gdcfhg Z bXg Uh: `cf]XU 5/ A "

Gi [[gž'k \c'k Ug'\]fYX'Vm: `cf]XU'5/ A '4 gh'Ug'h\Y']bj Ygh][Uh]cb]bhc'\Yf'UWh]j]h]Yg'VY[Ubž']g'gU]X'hc'\Uj Y'a]gi gYX'\Yf'WcfdcfUhY WfYX]h'WUfX'Zcf'dYfgcbU``YI dYbgYg'h\Uh']bWi XYX'W\Uf[Yg'Uh WUg]bcg'Xi f]b['k cf_'hf]dgž'X]g[i]gYX'Ug'`Y[]h]a UhY'Vi g]bYgg a YU`g'' \dangle fYgdcbgY'hc'h\Y'gWUbXU`ž'\dhYf]a ': `cf]XU'5/ A 'DfYg]XYbh H]a ch\m6YUfX'Ya d\Ug]nYX'h\Uh'h\Y'i b]j Yfg]hm']g'Uk UfY'cZ'h\Y g]hi Uh]cb'UbX']g'UWh]j Y`m'a cb]hcf]b[']h''FYdcfhg']bX]WUhY'h\Y : `cf]XU'8YdUfha Ybh'cZ'@Uk '9bZcfWYa Ybh']b]h]UhYX']hg]bj Ygh][Uh]cb'UZhYf'U'fYZYffU``Zfca 'h\Y'8YdUfha Ybh'cZ 7ca a YfWY g'\dgaygdYWhcf'; YbYfU`ž'\][\`][\h]b['h\Y']a dcfhUbW''cZ cj Yfg][\h']b'Z]bUbW]U`'a UhhYfg''

$I bXYfghUbX]b[h\Y 7\Uf[Yg$

H\Y'gdYW]Z]Wg'cZ'h\Y'U``Y[Uh]cbg'U[U]bgh'Gi [[g'dU]bh'U'hfci V`]b[d]Whi fY'cZ'a]gWcbXi Wh"5\W\cfX]b['hc': cl'BYk gž'\Yf'dfU\h]\W'g]b\Wi XYX'a U_]b['i bUi h\cf]nYX'k]fY'hfUbgZYfgž'\Ug\'k]h\XfUk U`gžUbX'dYfgcbU`'di f\W\UgYg'hchU`]b['cj Yf'`&(ž\\$\"K\Yb'\\cbZfcbhYX\UVci h'h\YgY'\W\Uf[Ygž'Gi [[g'fYdcfhYX`m'\WU]a YX'h\Uh'gca Y'k YfYU\\W]XYb\U`"<ck Yj Yfž'h\Y'Yj]XYb\W'gi [[Yghg'U'\WYUf'dUhhYfb'cZa]gi gY'cZ'Zi bXg'h\Uh'fU]gYg'YmYVfck g'bch'' gh'k]h\]b'h\Y'Uh\`Yh]\WXYdUfha Ybh'Vi h'U\\fogg'h\Y'Ybh]fY'i b]j Yfg]hm"

5g'h\Y'g]hi Uh]cb'i bZc`Xgž'h\Y']a d`]WUh]cbg'Zcf': `cf]XU'5/ A 'Wći `X VY'g][b]Z]WUbh"'5 'ZU]`i fY'hc'UXXfYgg'h\YgY']ggi Yg'bch'cb`m h\fYUhYbg'h\Y'Z]bUbW]U`ghUV]`]hm'cZ'h\Y'Uh\`Yh]WXYdUfha Ybh'Vi hU`gc'i bXYfa]bYg'h\Y'hfi gh'cZ'h\Y'Wca a i b]hm"' =h g'U'ghUf_fya]bXYf'cZ'U'VfcUXYf']ggi Y']b'gdcfhg'[cj YfbUbW'''5g'bchYX'Vm'D`Um'6m'H\Y'Fi `Ygž'ZfUi X']b'gdcfhg'Wi Vg'\Ug'VYWca Y'Ub]bhYfbUh]cbU`'WcbWfbž'k]h\'j Uf]ci g'gdcfhg'cf[Ub]nUh]cbg k cf`Xk]XY'VUhh`]b['g]a]`Uf']ggi Yg'cZ'a]ga UbU[Ya Ybh'UbX Ya VYnn`Ya Ybh"'H\Y'fYdcfh'\][\`][\hg'h\Uh'ZfUi X'WUb'ghYa 'Zfca dfYggi fYž'cddcfhi b]hmž'UbX'fUh]cbU`]nUh]cbž'gYfj]b['Ug'U WUi h]cbUfm'hU`Y'Zcf': `cf]XU'5/ A 'Ug']h'gYY_g'hc'bUj][UhY'h\]g'Wf]g]g"

$H \setminus Y = a \ dUWh \ cZ : fUi \ X \ cb \ Gdcfhg$

 $\label{thm:continuous} $$ \Upsilon_{G}(X) = X^{-1}bW_{G}(X) + Y_{G}(X) + Y_{G}(X)$

±b·h\YgY`W\U``Yb[]b['h]a Ygž'h\Y'i b]j Yfg]hm`Wca a i b]hm`a i gh`Wca Y hc[Yh\Yf`hc`UXXfYgg'h\Y'g]hi Uh]cbˈdfcUWh]j Y`mž'Ybgi f]b['h\Uh'h\Y]bhY[f]hm`cZh\Y]f`Uh\`Yh]Wdfc[fUa g`]g'dfYgYfj YX"'5g'h\]g'ghcfm
XYj Y`cdgž'U```YmYg'k]```VY`WcgY`m`cb': `cf]XU'5/ A ž'k UhW\]b['\ck h\Ym`a UbU[Y'h\Y]f'fYgdcbgY'UbX'k\Uh'a YUgi fYg'k]```VY

8 Y hU]`g	
Cfh	@Ycb'7cibhmž:`cf]XUž'lG5
EiY``Yb	• k k k "ZcI b Y k g"Wca
	• bYk g"k Zgi "cf[
	• kkk"d`UmVmh\Yfi`Yg"bYh"Ui

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