

Gi Yn A YX]WU`7ca d`Yl. BYi Y');! HYWXbc`c[]Yb fYj c`i h]cb]YfYb XUg ; Ygi bX\Y]hgk YgYb°

Ÿ[mdhYbg Gi Yn A YX]WU`7ca d`Yl i bX HY`YWca '9[mdh dfÀgYbh]YfYb]bbcj Uh]j Y'); !HYW\bc`c[]Yb ni f X][]hU`Yb HfUbgZcfa Uh]cb]a ; Ygi bX\Y]hgk YgYb"



Gi Yn A YX]WU`7ca d`YI ž'Ÿ [md hY b '! '\ XYb ``YhnhY b '\ \\ \\ X]Y 'X][]hU`Y '\ HfUbgZcfa Uh]cb ']a '; Ygi bX\Y]hgk YgYb 'ghUf_ 'Ub 6YXYi hi b['[Yk cbbYb" 8]Y 'Ÿ [md h]gW\Y'; Ygi bX\Y]hgVY\ÔfXY 'i bX < i Uk Y]`\UVYb '_Øfn`]W\XX]Y ']bhY [f]YfhYb 'J cfhY]`Y 'XYf'); ! HYW\\ bc`c[]Y 'Ua 'Gi Yn 'A YX]WU`7ca d`YI 'j cf[YghY``hž'k Ug'Y]bYb YW\\ hYb 'GW\\ f]hh']b 'X]Y 'Ni _i bZh'XYg'; Ygi bX\Y]hggY_hcfg'XUfghY``h" K]Y 'XYf'J cfg]hnYbXY 'XYf'5``[Ya Y]bYb ; Ygi bX\Y]hgVY\ÔfXYž 5\a YX'9``GcV_mž'Yf`\\ Ai hYfhYž'VYUVg]W\\ h][h'X]YgY'\\ \\ \b)h]Uh]j Yž'Y]b bUW\\ U`\ h][Yg'A cXY```ZØf'X]Y 'X][]hU`Y'; Ygi bX\Y]hgj Yfgcf[i b['ni gW\\ UZZYbž'XUg'Ui Z'ZcfhgW\\ f]hh`]W\\Yb 'HYW\\ bc`c[]Yb 'VUg]Yfh" '8 UVY] k]fX'XYf'Gi Yn'A YX]WU`7ca d`YI 'U`g'XUg'YfghY'6Y]gd]Y``X]YgYf

 $\label{eq:continuous} $J = J_g(x)^* Y_g(x)^* Y$

8]Y'JcfhY]`Y'XYf'8][]hU`]g]Yfi b[']a ; Ygi bX\Y]hgk YgYb

K]Y 'X]Y '8][]hU`]g]Yfi b['XUg'; Ygi bX\Y]hgk YgYb 'fYj c`i h]cb]Yfhž']gh i bØVYfgY\VUf" '8]Y '9]bZØ\fi b['X][]hU`Yf'HYW\bc`c[]Yb 'ZØ\fh'b]W\h bi f'ni 'gW\bY``YfYf'? ca a i b]_Uh]cbž'gcbXYfb 'Ui W\ni YZZ]n]YbhYfYb 'J Yfk U`hi b[gUV`Ài ZYb" '8]Y '`Àgh][Yb :: UI bUW\f]W\hYb i bX 'DUd]YfZcfa i `UfY'_ObbhYb 'VU`X 'XYf'J Yf[Ub[Yb\Y]h Ub[Y\OfYbž'k À\fYbX'DUh]YbhYbXUhYb 'ghYhg'VYfY]h[YghY``h'k YfXYb _ObbYbž'k c'g]Y 'bOh]['g]bX" '8]Yg'g]bX'U``Yg'J cfUi ggYhni b[Yb 'ZØf Y]bY'ei U`]hUh]j '\cW\k Yfh][Yi bX'a YbgW\YbnYbhf]YfhY 6Y\UbX`i b[ž'k]Y'Vi bXYg[Ygi bX\Y]hga]b]ghYf]i a "XY ZYghghY``h"

9]b'k Y]hYfYf'k]W\h][Yf'5gdY_h'XYf'8][]hU`]g]Yfi b[']gh'X]Y gmghYa Uh]gW\Y'5i gk Yfhi b['j cb'; Ygi bX\Y]hgXUhYb"'8]YgY Yfa Ò[`]W\h'Y]bY'gW\bY``YfY'9f_Ybbi b['j cb'?fUb_\Y]hYb'i bX YfÒZZbYh'j]Y`j YfgdfYW\YbXY'bYi Y'H\YfUd]YUbgAhnY"'8UfØVYf \]bUi q'qhAf_Yb'a cV]`Y'5bk YbXi b[Yb'X]Y'GY`VqhVYqh]a a i b['XYf

9]b 6`]W_]b X]Y Ni _i b Zh

8]Y '9bhk]W_`i b[Yb']b'Ÿ[mdhYb'nY][Ybžk]Y'k]W\h]['Yg']ghž a cXYfbghY'HYW\bc`c[]Yb']a '; Ygi bX\Y]hggY_hcf'ni ']bhY[f]YfYb" 8Ug'9b[U[YaYbhžXUg']a 'GiYn'AYX]WU''7ca d`Yl'i bX'XYf DUfhbYfgW\UZh'nk]gW\Yb'HY`YWca '9[mdh'i bX'?UfYLdYfh'ni a 5i gXfi W_'_ca a hž'gd]Y[Y`h'VfY]hYfY'HfYbXg'k]XYfž'X]Y'Ui W\']b k Ygh`]W\Yb'; Ygi bX\Y]hggmghYaYb'Ub'6YXYi hi b['[Yk]bbYb"'Jcb XYf'6Y_ÀadZ|b['W\fcb]gW\Yf'9f_fUb_i b[Yb'V]g'\]b'ni f G]W\YfghY``i b['XYf'aYX]n]b]gW\Yb'JYfgcf[i b[']b'`ÀbX`]W\Yb ; YV]YhYb''X]Y'

± XYf gW bY```YV][Yb K Y`h'j cb \Yi hY gW Y]bh Ygž U`gʻcV XYf
X][]hU`Y K UbXY``]a ; Ygi bX\Y]hgk YgYb Yfgh Ua '5b ZUb['ghY\h"
8 c W a]h XYb GW f]hhYbž X]Y 'Ÿ[md hYb ii bhYfb]a a hž `YfbYb k]f j]Y`
ØVYf X]Y A Ò[`]W _Y]hY bž X]Y ii bgʻXUgʻX][]hU`Y NY]hU`hYf 'V]YhYh"
6`Y]VYb k]f [Ygd Ubb hž k]Y 'g]W X]YgY 'HYW bc`c[]Yb k Y]hYf
Ybhk]W_Y`b ii bX k Y`W Y bYi Yb 'GhUb XUf Xgʻg]Y ']b 'XYf
; Ygi bX\Y]hgj Yfgcf[i b['gYhnYb k YfXYb"

8YhU]`g	
Cfh	GiYn^AYX]WU`^7cad`Ylž'Ÿ[mdhYb
EiY``Yb	• k k k "g]g"[cj "Y[
	Yb[`]g\"bYk gbUh]cbhj "Wca
	• k k k "Vi bXYg[Ygi bX\Y]hga]b]ghY
	f]i a "XY

6Ygi WXYb G]Y i bg Ui Z. k ca, + "XY