

BYi Yf'8 < @!DU_Yhg\cd'YfÒZZbYh']a '9XY_U! A Uf_h'? U`hYbVYf[

BYiYf'8<@!DU_Yhg\cd']a '9XY_U!A Uf_h'?U`hYbVYf[']b'HfY]g!?UfXYb'YfÒZZbYh''=bZcfa]YfY'X]W\'ØVYf'2 ZZbib[gnY]hYb'ibXGYf]W\g'UiZ'dcghZ]bXYf"XY"

a '9XY_U!A Uf_h'? U`hYbVYf[']b 'HfY]g!? UfXYbž'? fY]g'7cW.Ya !NY``ž []Vh'Yg'Y]bY'Ui ZfY[YbXY'BYi][_Y]h'ZØf'U``Y'6Yk c\bYf'XYf ; Ya Y]bXY"'9]b'bYi Yf'8 < @!DU_Yhg\cd'\Uh'gY]bY'DZcfhYb'[YÒZZbYh i bX'V]YhYh'Y]bY'J]Y`nU\`'j cb'8]Ybgh`Y]ghi b[Yb'j cb'a cbhU[g'V]g gUa ghU[g'j cb', 'V]g'&\$'I \f"' <]Yf'_ÒbbYb'b]W.h'bi f'6f]YZa Uf_Yb Yfk cfVYb'k YfXYbž'gcbXYfb'Ui W.'DU_YhY'Ui Z'XYb'K Y['[YVfUW.h cXYf'Ub[Ybca a Yb'k YfXYb"Ni XYa 'VYghY\h'X]Y'A Ò[`]W._Y]hž DU_YhfYhci fYb'i b_ca d`]n]Yfh'UVni [YVYb"

8]Y '9fÒZZbi b['XYg'DU_Yhg\cdg']b 'XYa '9XY_U!A Uf_h'V]YhYh'XYb 6Yk c\bYfb'j cb'HfY]g!? UfXYb'Y]bY'k Y]hYfY'VYei Ya Y'i bX nY]hgdUfYbXY'A Ò[`]W_Y]hž']\fY'DU_YhY'ni 'j YfgYbXYb'cXYf'ni Yf\U`hYb"'8]Y 'nYbhfU`Y'@U[Y'XYg'G\cdg'a UW\h'Yg'VYgcbXYfg Y]bZUW\ž'X]Y'[Yk ØbgW\hYb'8]Ybgh`Y]ghi b[Yb']b'5bgdfi W\'ni bY\a Ybž'c\bY'`Ub[Y'K Y[Y'ni fØW_`Y[Yb'ni 'a ØggYb"

: Øf'a Y\f' → Zcfa Uh]cbYb'ØVYf'X]Y'GhUbXcfhY'XYf':]`]U`Ybž

DU_Yhg\cdg'i bX'XYfYb'² ZZbi b[gnY]hYb'gck]Y'XUg'[YgUa hY

GYfj]WYUb[YVchž'_ÒbbYb'?i bXYb'X]Y'K YVg]hY'k k k "dcghZ]bXYf"XY

VYgi WXYb"'<]Yf'Z]bXYb'g]Y'U``Y'fY`Yj UbhYb' → Zcfa Uh]cbYb'Ui Z

Y]bYb'6`]W_ži a ']\fY'DU_Yh[YgWXÀZhY'bcWX'YZZ]n]YbhYf

UVni k]W_Y`b"

 $8] Y `9fOZZbi b[`XYg`8 < @DU_Yhg\cdg`]a `9XY_U!A Uf_h`? U`hYbVYf[ghY``h`gca]h`Y]bY`6YfY]WXYfi b[`ZØf`X]Y`; Ya Y]bXY`HfY]g!? UfXYb$

 $XUf'i bX'V]YhYh'XYb'9]bk c\bYfb'Y]bY'_ca ZcfhUV`Y'i bX \\ ni j Yf`Agg][Y'@Ògi b['ZØf']\fY'DU_Yhj YfgUbXVYXØfZb]ggY'''6Ygi WXYb \\ G]Y'XYb'bYi Yb'DU_Yhg\cd'i bX'bi hnYb'G]Y'X]Y'j]Y`ZÀ`h][Yb \\ GYfj]WYgž'X]Y'\RightarrowbYb'Xcfh'Ub[YVchYb'k YfXYb''' 'B 5;$

8 YhU]`g

6Ygi WXYb G]Y i bg Ui Z b!U["XY