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- &" 5dd`mih\Y`df]bW]d`Yg`cZ\YU`h\midfcZ/gg]cbU``dfUWf]WY`hc`j cWU``UbX`]bglfi a YbhU``hYW\b]ei Y`UbX dYfZcfa UbW
- '" → XYbhZmfY`Uhcbg\]dg'Uacb[]ggiYg]bZcfa]b[dYfZcfaUbWYdfUWh]WY
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Ghi XYbhgfidYfgcbU``g_]``g']b'dYfZcfa UbW'cf'Wca dcg]h]cb'k]``VY'XYj Y`cdYX'h\fci [\'%'Wcbgi `hUh]cbg'k]h\ gdYW]U`]ghhi hcfg'Q'I''%\ci f'YUW\'hf]a YghYfQ''+b'k cf_g\cdg'Q'I''%') '\ci fg'YUW\'hf]a YghYfQ']bghfi a YbhU` UbX'j cWU``ghi XYbhg'k]```U]b'dYfZcfa UbW''YI dYf]YbW'zk\]Y'Wca dcg]h]cb'ghi XYbhg'k]```VYWca Y'ZJa]`]Uf k]h\]ggi Yg'UZYWh]b['dYfZcfa UbW''UbX'dYfZcfa UbW''dfYdUfUh]cb'''K cf_g\cd'gYh]b[g'k]``'U`gc'gi ddcfh Yb[U[Ya Ybhk]h\]ggi Yg'WcbWfb]b['a i g]W]Ubgfi\YU'h\ 'UbX'k Y``VY]b[z'h\Y'XYj Y`cda YbhcZgfU[Y'WcbXi Wz UbX'Ub'YYa YbhcZdYYf'cVgYfj Uh]cb'Zcf'gdYW]U`]ghdYfZcfa UbW''UbX'Wca dcg]h]cb'[fci dg''Ghi XYbhg'k]`` UhhYbX'a UghYfWUggYg'YX'Vmj]g]h]b['YI dYfhg']b'U'fUb[Y'cZa i g]WU`']bghfi a Ybhgz'j c]W'g'UbX'ghmYgz YbWci fU[]b['ghi XYbhg'hc'XfUk'`]b_g'UbX'Wca duf]gcbg'k]h\ 'h\Y]f'dYfgcbU`'ghi X]Yg'OW\ccg]b['('I'&\ci fg Zca 'b]bY'a UghYfWUggYg'UWfcgg'h\Y'mYUfO''5``ghi XYbhg'k]``dUfh]W]dUhY']b'X]fYWMYX'YbgYa V`Ygz'W\ccg]b[Zca 'U'k]XY'fUb[Y'cZa i g]WU''ghmYg'UbX'W`h fYg'Q'I'&\cg]b['X'ci fg YUW\'hf]a YghYfO.

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Q: YfY 'mci 'WUb'ci h]bY'UbmfY'Yj Ubh]bZcfa Uh]cb'h\Uhk Ug'bch]bWi XYX']b'5 \Rightarrow G'Vi ha Umdfcj Y'\Y'dZ `'Zcf mci f'ghi XYbhg": cf'Yl Ua d'Yžmci 'a][\hdfcj]XY'XYHU]`g'cb'h\Y'fYZYfYbW]b['gmghYa ž``]b_g'hc'dfYj]ci g ghi XYbhYl Ya d'Ufg'cf'h\Y'XYg][bUhYX'k YY_']b'h\Y'Wti fgY'h\Uhmci 'k]```X]gW gg'h\Y'UggYgga Ybh'Uh'Yb[h\" \Rightarrow dcfhUbhmž'h\]g'gYWf]cb']g'Ub'UfYU'Zcf'mci 'hc'dfcj]XY']bZcfa Uh]cb'h\UhXcYg'bch[c'h\fci [\'h\Y'Uddfcj YX [cj YfbUbWY'ghfi WhifY"Q

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D`YUgY`bchY`h\Uh`YWh fY`fYWcfX]b[g`UfY`bch'Uj U]`UV`Y`Zcf`h\]g`Wci fgY"`Ghi XYbhg`UfY`ghfcb[`mYbWci fU[YX`hc UhhYbX`U```WUggYg`UbX`WcbhUWh\Y`7 ci fgY`5i h\cf]hmhc`a U_Y`U`hYfbUh]j Y`UffUb[Ya Ybhg`Zcf`WUggYg a]ggYX"

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&" ``A chicbž'9a chicbž'UbX'@cj Y. `H\Y'B Uhi fY'cZ5fhighiWDYfZcfa UbWY'VmiH\ca Ug'7 Ufgcb'A Uf

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@f]YZmci h]bY`\ck 'ghi XYbhZYYXVUW_flVch\ 'Zcfa U``UbX`]bZcfa U`E'cb'h\Y`Wci fgY`k]```VY`[Uh\YfYXž\ck ']h k]``VY`UbU`mgYX`UbX`\ck ']hk]```VY`UbWYX`i dcb'hc']a dfcj Y`h\Y`ghi XYbh`YUfb]b['YI dYf]YbW''': cf'YI Ua d`Yž mci 'a][\hX]gW gg`k \Uhk Ug`]XYbhZ]YX`]b'dUghZYYXVUW_UbX`\ck 'h\]g'Wci fgY`k Ug'WXUb[YX'hc'UXXfYgg'h\Y]ggi Y"Q

Gi Va]gg]cb cZ5ggYgga YbhHUg_g

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a i ghfYhJ]b'mci f'r]\W_Yhbi a VYf'\Zfca '9I hYfbU''Gi ddcfhfU'cb['k]h\'Ubmch\Yf'fY'Yj UbhXcW a Ybfg\L'rc
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UfY'' bUYY''mfYWY']j Y'U'r]\W_Yhbi a VYf\Zfvi h]Zmci 'hY'Yd\cbY'mci 'k]'''bYYX'rc'gdYW]\ZfwJ''mUg_'Zcf'cbY''
Hi fb]h]b'U'gc'dfcj]XYg'i dXUhYg'cb'h\Y]f'gmghYa 'gfUh' g'cb'Hk]hYf"

; YbYfU``mž'UggYgga YbhiHug_g'a i ghVY'gi Va]hhYX'Y`YVWfcb]\W)``mij]U'Y]h\Yf'Hi fb]h]b'cf'U'A ccX`Y Ugg][ba Ybh'' =b']bgHJb\W'g'k \YfY'h\]g']g'bchdcgg]V`Yž']hk]``'VY'gHJhYX'cb'mci f'\\ci fgY'g'A ccX`Y'g]hY'k]h\ U`hYfbUh]j Y'gi Va]gg]cb'XYhJ]`g''

cfi]bZcfa Uh]cbicbi\ckihcigi Va]hUgg][ba Ybhgicbi]bYij]UiA ccXiY.i\hdg.#gh XYbh'i bgk "YXi "Ui #\ck! qi Va]hUgq][ba Ybha ccXiY

5 WUXYa]W<cbYghmUbX D`U[]Uf]ga

D`U[]Uf]ga i]gii g]b[ih\Yik cfXgicfi]XYUgicZch\YfgiUbXidfYgYbh]b[ih\Ya iUgimci fick b"i±i\WbihU_Yia Ubm Zcfa gžZfca iXYi]VYfUhYiW\YUh]b[ihciU\W]XYbhU`m\Wcdm]b[iZfca iUigci f\Wik]h\ci hiU\w_bck iYX[Ya Ybh'

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7 cdm]b[.'i g]b['h\Y'gUa Y'cf'j Yfmg]a]`Uf'k cfXg'hc'h\Y'cf][]bU`hYl h'cf']XYU'k]h\ci h'UW_bck `YX[]b['h\Y gci fW'cf'i g]b['ei chUh]cb'a Uf_g"'H\]g'U`gc'Udd`]Yg'hc']a U[Ygž'Ufh'UbX'XYg][b'dfcYWhgž'Ug'k Y``'Ug dfYgYbhUh]cbg'k \YfY'gca YcbY'dfYgYbhg'Ubch\Yf'g']XYUg'cf'k cfXg'k]h\ci h'WfYX]h'

⇒ Uddfcdf]UhY 'dUfUd\fUg]b[. '7\Ub[]b['U'ZYk'k cfXg'UbX'd\fUgYg'k\]Y 'a cghmfYhU]b]b['h\Y'cf][]bU`ghi Wh fY 'UbX#cf'dfc[fYgg]cb'cZ]XYUg'cZh\Y'cf][]bU`žUbX']bZcfa Uh]cb'k]h\ci hUW_bck`YX[Ya Ybh'H\]g'U`gc Udd`]Yg']b'dfYgYbhUh]cbg'k\YfY'gca YcbY'dUfUd\fUgYg'Ubch\Yf'g']XYUg'cf'k cfXg'k]h\ci h'WfYX]h'UbX'hc d]YW]b['hc[Yh\Yf'ei chYg'UbX'dUfUd\fUgYg']bhc'U'bYk'k\c`Yžk]h\ci h'Uddfcdf]UhY'fYZYfYbW]b['"

7 c``i g]cb.'k cf_jb['k]h\ch\Yfg'Vi hdUgg]b['cZZh\Y'k cf_'Ug'U'dYfgcb'g']bX]j]Xi U``k cf_"'7 c``i g]cb'U`gc]bWi XYg'dfcj]X]b['mci f'k cf_'hc'Ubch\Yf'ghi XYbhVYZcfY'h\Y'Xi Y'XUhYžcf'Zcf'h\Y'di fdcgY'cZh\Ya d`U[]Uf]g]b['UhiUbmh]a Yž'dUm]b['Ubch\Yf'dYfgcb'hc'dYfZcfa 'Ub'UWUXYa]WhUg_ž'ghYU']b['cf'UWei]f]b[Ubch\Yf'dYfgcb'g'UWUXYa]Wk cf_'UbX'Wcdm]b[']hz'cZYf]b['hc'Wca d'YhY'Ubch\Yf'dYfgcb'g'k cf_'cf'gYY_]b[dUma YbhZcf'Wca d'Yh]b['UWUXYa]Wk cf_"

±bUddfcdf]UhY`W]hUh]cb.`7]h]b[`gcifWrg`k\]W\`\UjY`bchVYYb`fYUXžk]h\cihUW_bck`YX[]b[`h\Y`″gYWcbXUfm″gcifWrZfca`k\]W\`_bck`YX[Y`cZh\Ya`\Ug`VYYb`cVhU]bYX"

8 i d`]\WUh]cb`ffgY`Zd`U[]\Uf]ga "Ł gi Va]\h]b[`mci f`ck b`k cf_ž]b`k \c`Y`cf`]b`dUfhžk \YfY`]h\Ug`dfYj]ci g`m VYYb`dfYdUfYX`cf`gi Va]\hYX`Zcf`Ubch\Yf`UggYgga Ybhcf\Wci fgY`UhI BGK `cf`Ubch\Yf`i b]j Yfg]\m'

7 cffYWnfYZYfYbWlb['dfUWnWyg.

• DUfUd\fug]b[z'gi a a Uf]q]b[z'YggUmk f]hb['UbX'ha Y'a UbU[Ya Ybh