

JYfXfÀb[hYf'?fmdhc!5bkU`h'YfÒZZbYhbYiY'?Ubn`Y]'bUWX'5jU!@UVg!G_UbXU`

- ?m`Y`FcW\Y`]gh`Yhnh`a]h`Y]bYf`bYi Yb`5bk U`hg_Ubn`Y]`a]h G]hn`]b`BYk`Mcf_'j YfVi bXYb
- FcWXY'k]fX'?Ym]!79C'*Jgcb'GhcbY']b'Y]bYa '`Ui ZYbXYb
 Yf]WXhqj YfZU\fYb'[Y[Yb'7Y`q]i g'j YfhfYhYb

?m`Y`FcW\Yž`XYf`ia_ÀadZhY`?fmdhc!5bkU`hž`XYf`]a`A]hhY`dib_h Y]bYg`\cW_UfÀh][Yb`9IdcgÅg`ghY\hž`]b`XYa`Yf`kY[Yb`Y]bYg [Y\Y]aYb`DU_hg`a]h`5jU`@UVg`[YcihYh`kifXYž'kifXY`_Øfn`]W\`jcb XYf`jcb`]\a`a]hVY[fØbXYhYb`5bkU`hq_Ubn`Y]`ZU``Yb`[Y`UggYb"

≯hnh'\Uh'Yf'VYfY]hg'Y]bY'bYiY'DfUl]g'YfÒZZbYh' 'i bX'UfVY]hYh'a]h Y]bYa 'U`hYb'?i bXYb'ni gUa a Yb"

8 Yf '5 bk U`h']gh'Y]b'[YgYhn`]W\Yf'J YfhfYhYf'j cb'*Jgcb'GhcbYž'79C XYg'GhU_]b[!GcZhk UfY!'i bX'GhfUhY[]Yi bhYfbY\a Ybg'?Ym]ž']b Y]bYa '`Ui ZYbXYb'; Yf]W\hgj YfZU\fYb'[Y[Yb'XYb'VUb_fchhYb ?fmdhc!?fYX]h[YVYf'7Y`g]i g'k Y[Yb'Ub[YV`]W\Yf A Uf_ha Ub]di `Uh]cb"'

8 Ua U`g'<mark>6 YgWk YfXY'j cb'? Ym]</mark>'Y]b[YfY]Wkh'k i fXYž'k Uf'FcWkY bcWk'DUfhbYf'VY]'XYf'5bk U`hg_Ubn`Y]'FcWkY': fYYXa Ub"'

9\(\text{B}\) A \(\text{JhhY}\) i \(\begin{align*} b[\cdot \text{VVY} f(\text{XYb}): \] \(\frac{1}{2} \) fa \(\text{Ybk} \text{YW} \) gY \(\text{YY}\) b[\(\text{YY}\)] w\(\text{h}\) 8 \(\text{cbY} fghU[\cdot nY][\cdot hU_h] \text{b} \(\text{V} f(\text{Y}) f(\text{VUb} X)] \) b \(\text{Y} f(\text{Y}) f(\te

6]hhY bY\a Yb G]Y ni f'?Ybbhb]gž'XUgg'*Jgcb'GhcbY'i bX'?Ym]ž' ₺\W\\]Yfa]h'XUg'; Yf]\W\h'i bX'U``Y'Y]b[YhfU[YbYb'DUfhY]Yb'XUfØVYf]bZcfa]YfYbž'XUgg'?m`Y'K "'Fc\W\Yž'XYf'U`g'FYW\hgUbk U`h'VY]X]YgYa '; Yf]\W\h'ni [Y`UggYb']ghž'Yhnh'a]h'?m`Y'Fc\W\Y'D5
j YfVi bXYb']gh ž'gU[hY'XYf'5bk U`h'X]Y'5V`U[Y"

FcWXY: fYYXa Ub'Z]fa]Yfh'bUWX'XYa '5j U!@UVg! G_UbXU`i a

8]Y '6YghÀh][i b['XYg'bYi Yb';][g'j cb'FcW\Y'_ca a h'X]fY_h bUW\XYa 'Yf'Ui g'gY]bYf'U`hYb'DfUl]g'j YfXfÀb[h'k i fXYž'k c'Yf'_Y]b 9][Yb_Ud]hU``a Y\f'\À`h"

K]f'_cbnYbhf]YfYb'i bg'XUfUi Zž'i bgYfYb'A UbXUbhYb'k Y]hYf\]b Yfgh_`Ugg][Y'J YfhfYhi b[Yb'ni 'V]YhYbž'i bX'g]bX'ghc`n'Ui Z'X]Y V]g\Yf][Yb'9fZc`[Y'XYf'? Ubn`Y]"'K]f'k ØbgW\Yb'? m`Y'XUg'6YghY'ZØf gY]bY'ni _ØbZh][Yb'I bhYfbY\a i b[Yb ž'gU[hY'Y]b'GdfYW\Yf'XYf :]fa U'[Y[YbØVYf'6`cW_k cf_g"

8]YgYgʻl bhYfbY\a YbžʻXUgʻZfØ\YfʻFcW\Yʻ: fYYXa Ubʻ\]Y» ž'k i fXY Yhnhʻ]bʻ: fYYXa UbʻBcfa UbXʻ: f]YX`UbXʻi a VYbUbbh''

FcW\Yg'Fc``Y'Xcfh'kifXY'ghUf_'VY`UghYhž'bUW\XYa 'VY\UidhYh kifXYž'Yf'gY]'Ub'Y]bYa '[Y\Y]a Yb'DU_h'a]h'5jU'@UVgž'XYa 9bhk]W_`Yf'XYf'5jU`UbW\Y!6`cW_W\U]bž'VYhY]`][h'[Yk YgYb"'

FcWXYZX]Y'U`g'5bk U`h'ZØf'FcWXY': fYYXa Ub'UfVY]hYhž'\Uh
Ub[YV`]WX'ni [Ygh]a a hž'GUa a Y`_`U[Yb'[Y[Yb'X]Y'?cb_i ffYbhYb
j cb'5j U'@UVg'ni 'ZØ\fYbž'i a 'gYbg]V`Y'\dagged Zcfa Uh]cbYb'ni 'Yf\U`hYb
i bX'X]Y'DfØZ b['j cb'XYf'?fmdhcZ]fa U'UVni `Yb_Yb"

±b`\Y]a`]WX`UiZ[Ybca a YbYb`J]XYcg`VYgWXf]YV`g]WX`FcWXY`U`g
]bhYfbYf`?fmdhc!9IdYfhY`jcb`5jU`@UVg`ibX`VY\UidhYhYž`gY]bY
:À\][_Y]hYb`gY]Yb`X]fY_h`UiZ`gY]bY`JYfZc`[ib[`jcb`?`U[Yb`[Y[YbX]Y`<À`ZhY`XYf`IbhYfbY\aYb`]b`X]YgYa`6YfY]WX
nifØW niZØ\fYb"

Gck c\``FcW\Y`U`g`Ui W\`5j U`@UVg`\UVYb`X]Y`5bgW\i`X][ib[YbnifØW_[Yk]YgYb'ibX`VY\UidhYhž`g]Y`gY]Yb`_UhY[cf]gW\`ZU`gW\"HfchnXYa `nc[`g]W\`FcW\Y`gdÀhYf`U`g`5bk U`h`Uig`a Y\fYfYb; Yf]W\hgj YfZU\fYb`nifØW_`ibX`FcW\Y`:fYYXa Ub`kifXY`Uig`Y]bYfGUaaY`_`U[Y`[Y[Yb`XYb`GhUV`YWc]b!9a]hhYbhYb`HYh\Yf`[YZYiYfh"

 $\label{lem:cvfcwxyb} \verb|CV'FcWXY'bYVYb'?Ym|| bcWX'UbXYfY'IbhYfbY\aYb'U`g$

FYWX hgVYfUhYf'j Yfhf]hhž']gh'bcWX'i b_`Uf"'8Yf'5bk U`h'\Uh'X]Y'6]hhY j cb'6`cW_k cf_g'i a 'GhY``i b[bU\a Y'V]g'ni a 'FYXU_h]cbggWX`i gg b]WXh'VYUbhk cfhYh"

п + п

 $\label{eq:hamper} $$H\Y'dcgh'Ci\ hYX'7fmdhc'@Uk\ mYf'CdYbg'BYk':]fa\ '5ZhYf'5j\ U'@UVg\ GWUbXU'']gh'_Y]bY'Z]bUbn]Y``Y'6YfUhi\ b["$

8 Y hU]`c

6Ygi WXYb G]Y i bg Ui Z _fmdhc!bYk g"Uh