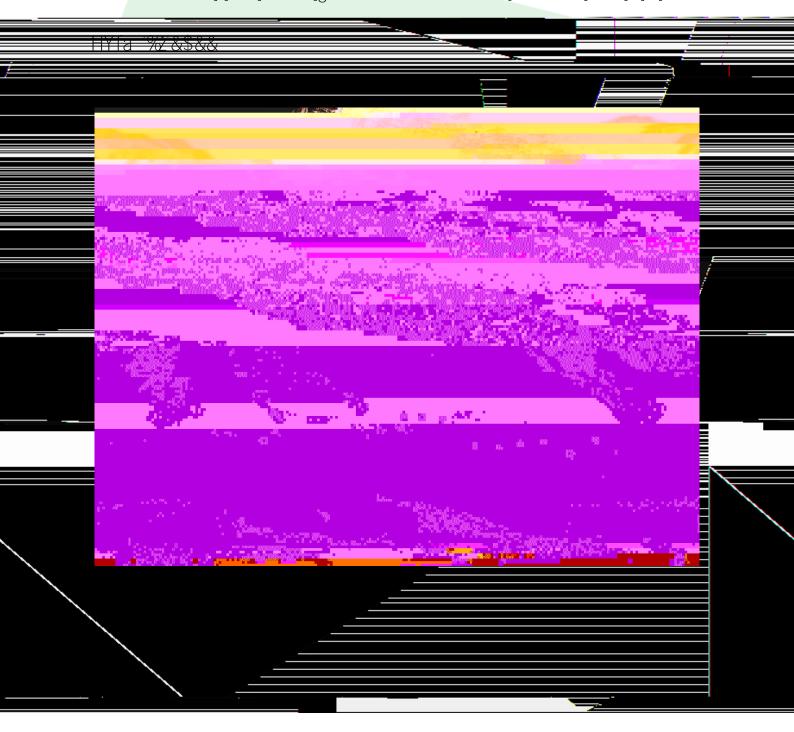


# **MINE8120**

< UnufX =XYbhjZjWUhjcbžF ]g\_ UbX GUZYhmA UbU[ Ya Ybh]b A ]b]b[</pre>



# 7ci fgY<sup>\*</sup>Cj Yfj ]Yk

## GHJZZ:7cbHJWhi8YHJ]`g

### 7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`]m	@cWJhjcb	D\cbY
7\Yb[[i c N\Ub[	VXYb[[ic"n\Ub[4 ibgk "YXi "U i_	A ccX`Yž'HYUa gž 9a U]`	GW.cc`cZ A ]bYfU`g`UbX 9bYf[ m F Ygci fWYg 9b[ ]bYYf]b[ C A 6ž'%) - 9	Ž*%'&'-',) (\$')

GWXcc``7cbHJWh'±bZcfa Uh]cb

GWkcc``cZA]bYfU`g`UbX`9bYf[mFYgcifWYgC`X`AU]b`6i]`X]b[ž@YjY``%z%)-'fP%) ŁIBGK 'GM8B9MBGK '&\$)&H5IGHF5\$=5

9b[]bYYf]b['Gh XYbhGYfj]WYg

## 7ci fgY 8YHJ] g

I b]hg cZ7fYX]h\*

#### Gi a a UfmcZh\Y'7ci fgY

H\Y'U]a 'cZh\]g'Wci fgY']g'hc'dfcj ]XY'gh XYbhg'k ]h\'Ub'UddfYW]Uh]cb'cZh\Y'VfcUX'fUb[Y'cZf]g\_g'ZUW'X'VmU a ]b]b[ 'cdYfUh]cbz'Zcf'k \]W'U'XmbUa ]WfUb[Y'cZf]g\_'a UbU[Ya YbhghfUhY[]Yg'UfY'fYei ]fYX'! 'Zfca ZYUg]V]`]hmz'd`Ubb]b[ 'UbX'XYg][ bz'h\fci [\'hc'bcfa U'`cdYfUh]cbg"'H\YgY']bWi XY'YWcbca ]Wf]g\_gz'[Yc`c[]WU`f]g\_gz'Ybj ]fcba YbhU`'f]g\_gz'Yl hYfbU`'ZJWcfg'UbX']bZi YbW'gz'UbX'cZWci fgY'\YU'h\'UbX'gUZYhmf]g\_g'''H\Y a cXi 'Y'k]``]bhfcXi W''gh XYbhg'hc'h\Y'dfcW'ggYg'cZ\UnUfX']XYbhJZWhlcbz'f]g\_UggYgga Ybhz'UbX'U'bi a VYf cZf]g\_'a UbU[Ya YbhghfUhY[]Yg'Uj U]`UV`Y''' +b'h\Y'WcbhYl hcZa ]b]b[ '\UnUfXg'UbX'gUZYhmfY`UhYX'f]g\_gz'h\Y Wci fgY'k]``U`gc'fYj ]Yk 'U'bi a VYf'cZ[YbYf]Wa ]bY'gUZYhmZUWcfg'UbX'\ck 'h\YgY'a Ub]ZYghh\Ya gY'j Yg']b X]ZYfYbha ]b]b[ 'gmghYa g'UbX'a Yh\cXg'cZa ]b]b[ "

#### 7 ci fgY 5]a g

H\]g`Wci fgY`U]a g`hc`Yei ]d`h\Y`ghi XYbhk ]h\`\_bck `YX[Y`UbX`g\_]``g`]b`f]g\_`UbX`gUZYhma UbU[Ya Ybh]b h\Y`a ]b]b[`]bXi ghfm'

#### DfYgYbhJh]cbgžfYUX]b[ž

⇒hfcXi Whcb hc F ]g\_A UbU[Ya Ybh

K YY\_'&

DfYgYbhJh]cbgžfYUX]b[žei]n

 $A \ ]b]b[ \ 'HYWXb]WU`'UbX'YWcbca \ ]Wf]g\_q$ 

K YY\_.'

DfYgYbhJh]cbgžfYUX]b[

A ]bY gUZYmrf]g\_g ! h\Y Z bXUa YbHJ g

K YY\_.(

DfYgYbhJh]cbgžfYUX]b[žei]n

A ]bY gUZYhmf]g\_g! UXj UbWXX WcbWYdhg

K YY\_.)

DfYgYbhJh]cbgžfYUX]b[

5jc]X]b['cf[Ub]nUh]cbU`'UVW]XYbhg

K YY\_'\*

DfYgYbhJh]cbgžfYUX]b[žei]n

Gi ghU]bUV]`]hmif]g\_g

K YY\_ +

7 ca d'YhY a U'cf Ugg][ ba Ybh/ gi Va ]h

### 5XX]h]cbU`7cifgY ±bZcfaUh]cb

H\]g'Wci fgY'Uggi a Yg'U'gh XYbh\Ug'\_bck YX[Y'cZ

- "VUg]Wa ]b]b[ 'UbX'[Yc`c[ ]WU`hYfa g'UbX'XYgWf]dh]cbg'
- "a]b]b[ 'gmghYa g'

# 5ggYgga Ybh

5ggYgga YbhHJg_	K Y][ \h	8iY'8UHY	7 ci fgY`@YUfb]b[ Ci hWca Yg`5ggYggYX
%"·C b`]bY·E i ]nnYg	*\$1	9bX°cZK _g°%l*	%ž'&ž'' ž'(
&"`=bX]j]XiU`fYdcfh	&) ı	%( #\$' #&\$&&`%\$.\$\$`5A	%ž'&ž'' ž'(
ˈ"=ĐX]j]XiU`fYdcfh	%) ।	\$(#\$(#&\$&&`%\$.\$\$`5A	%ž'&ž'' ž'(

#### 5ggYgga Ybh'% 'Cb`]bY Ei ]nnYg

GHJfhXUhY. GHJfhcZK \_g'%'\*
8i Y'XUhY. 9bXcZK \_g'%'\*

 $* "gYhg"cZei"]nnYg"UfY"]bWi XYX"Zcf"* "k YY_g"$ 

5ggYgga Ybh& \DX]j ]Xi U`fYdcfh

8i Y'XUhY.'%(#\$'#&\$&&'%\$.\$\$'5A

⇒j Ygh][ Uh]cb cZU a Uĉfa ]b]b[ ]bW]XYbh

5ggYgga Ybh'. ⊕X]j ]Xi U`fYdcfh

8i Y'XUhY. '\$(#\$(#&\$&&'%\$.\$\$'5A

F ]g\_g'cZa ]b]b[ ']b'XYj Y`cd]b[ 'Wci blf]Yg'

# 5 hhyb XUb WY F Yei ]fYa Ybhg

 $\hbox{Ghi XYbhg'UfY'ghfcb[`m'YbWc'i fU[YX'hc'UhhYbX'U```WUggYg'UbX'fYj]Yk'``YWhi fY'fYWc'fX]b[g''' } \\$ 

# 7ci fgY'GWXYXi `Y

J]Yk 'WUgg'ha YhUV'Y

H]a YtUV`Y

8UhY	Hmd Y	7 cbhYbh		
K YY_'%'%(': YVfi Ufm! % ': YVfi Ufm	DfYgYblUlijcb	#olfcXi Whjcb hc F ]g_ A UbU[ Ya Ybh 7 cfdcfUhY Uhhjhi XYg hc f]g_ HmdYg cZA ]b]b[ F ]g_g @Uk g fY Uhjb[ hc F 5 UbX gUZYhm		
K YY_'&.'&%: YVfi Ufm! &) ': YVfi Ufm	DfYgYbfUf]cb	GUZYmiUbXif]g_ia UbU[Ya Ybh F]g_iUggYgga Ybhhccig GWcd]b[iUif 5 GUZYmi]biA]bYgi!iDYfWYdh]cbgiUbXifYUi]h]Yg 7\UiiYb[Yfij]XYc 7\UiiYb[Yfij]XYc 7\UiiYb[Yfiih\YiWJigYg 7ciia V]Ui!iUbch\YfigdUWYig\ihiYi]bW]XYbh D]dYfi5id\Uij]XYc		
K YY_" ."&, ": YVfi Ufm! ("A UfVX	DfYgYblUljcb	A UbU[]b['gUZYmi]b'5i glfU']Ub'7cU`A]bYg <ia 7cblfc`glfuhy[]yg'<="" <ia="" cf_'9bj]fcbaybh="" fg="" td="" ub'vy\uj]ci="" ub'zjwcfg'yb[]byyf]b[="" ubg']b'h\y'k=""></ia>		
K YY_'(.'+'A UfWX'!'\% A UfWX	DfYgYbfUf]cb	5 i glfU`]Ub`]bW]XYblg Bcfl\dUf_Yg'a cXi `Y  =blYfbUh]cbU`]bW]XYblg J UU`g'fYYZj ]XYc  < ck 'lc'Uj c]X'l\Y'X]gUglYfg GUZY'k cf_'VY\Uj ]ci fg'!'U'a cXY`'		
K YY_`).'%('A UfVX'!'% A UfVX	DfYgYblUlijcb	91 d`cfUhjcb 'UbX' [Yc`c[]\WJ`f]g_g 9\\cbca]\WUbX'dfc\Y\\f]g_g']\b'a]\b]b[ 7\UgY'gh \Xm'BYk'7\UY\Xcb]\U'B]\\\_Y` A]\b]\b['a\Yh\cXg'!'7\cfY'f]g_g  \displies fig\\f]g_ A]\bY'j\Ybh]`\Uhjcb'!'\U'\\cfY'f]g_ DfYgY: \%		

### FYgci fW/g

#### DfYgWf]VYX F Ygci fWYg

F Ygci fWfg Uj U] `UV `Y `cb `A ccX`Y

#### 7ci fgY 9j U`i Uh]cb UbX 8Yj Y`cda Ybh

5 hith Y YbX cZYUW. Wei fgYž'U```ghi XYbhg`k]```\Uj Y h\Y`cddcfhi b]lmhc Wea d`YhY`U`Wei fgY Yj U`i Uh]cb`Zcfa "H\YgY`Ubcbma ci g`gi fj Ymg`\Y`d'i g`i bXYfghUbX`mci f`j ]Yk g`cZh\Y`Wei fgYžmci f``YWhi fYfg`UbX`h\Y`Wei fgY a UhYf]U`g"`K Y`UfY`Webh]bi ci g`m]a dfcj ]b[ `ci f`Wei fgYg`VUgYX`cb`ghi XYbhZYYXVUW\_ž'UbX`mci f`dYfgdYWh]j Y ]g`j U`i UV`Y"

 $: YYXVUW_i]g^*[_i]j^*Yb^*j^*]U^*\underline{htdg.\#ghi}XYbh''ibgk "YXi"Ui \#a mYI dYf]YbWY^*UbX^*mci k_]^*VY^bch]Z]YX^k \Yb^*h^]g^*]g^*Uj^*Uj^*UV^*Y^*Zcf^*mci hc^*Wca d^*Yh'''$ 

K Y'U'gc'YbWci fU[Y'U``gh XYbhg'hc'g\UfY'Ubm'ZYXVUW\_'h\Ym\Uj Y'Ubm'h]a Y'Xi f]b['h\Y'Wci fgY'—']Zmci\Uj Y'U'WcbWfbz'd'YUgY'WcbhUWfi g']a a YX]UhY'm'

# Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

 $H\Y`GVX\cc``\Ug`XYj\ Y`cdYX`U`[i\ ]XY`]bY`hc`\Y`d`mci `k\Yb`gi\ Va\ ]hh]b[\ `U`Wci\ fgY`Ugg][\ ba\ Ybh'b]$ 



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

Mci f`YWi fYf'UbX'h\Y'I b]j Yfg]lmk]``YI dYWimci f`gi Va ]lhYX'Ugg][ ba Ybhg'UfY'lfi `mmci f`ck b'k cf\_"'I BGK \Ug'j YfmWYUf'[i]XY`]bYg'cb'k \Uhd`U[]Uf]ga ']g'UbX'\ck 'hc'Uj c]X']h'D`U[]Uf]ga ']g'i g]b[ 'h\Y'k cfXg'cf ]XYUg'cZch\Yfg'UbX'dfYgYbh]b[ 'h\Ya 'Ug'mci f`ck b"'D`U[]Uf]ga ']g'U'mdY'cZ]bhY``YWi U`'h\YZh''±i\Wb'hU\_Y a UbmZcfa gžZfca 'XY`]VYfUhY'W\YUh]b[ 'hc'UW]XYbhU``mWcdm]b[ 'Zfca 'U'gci fW'k]h\ci hUW\_bck `YX[ Ya Ybh' H\Y'I b]j Yfg]lm\Ug'UXcdhYX'Ub'YXi WUh]j Y'UddfcUW\ 'hc'd`U[]Uf]ga 'UbX'\Ug'XYj Y`cdYX'U'fUb[ Y'cZ fYgci fW'g'hc'gi ddcfhghi XYbhg"'5``h\Y'XYhU]`g'cb'd`U[]Uf]ga ž]bWi X]b[ 'gca Y'i gYZ ``fYgci fW'gžWUb'VY Zci bX'Uhk k k "qhi XYbhi bak "YXi "Ui #d`U[]Uf]ga "

 $5 ```A ]b]b[ "9b[ ]bYYf]b[ "ghi XYbhg"UfY"fYei ]fYX"hc "Wca d`YhY"U"ghi XYbhXYWUfUh]cb" Zcf"UWUXYa ]W]bhY[ f]hm k \]W. ]g"ci h]bYX']b"h\Y"Ugg][ ba YbhWcj Yf"g\YYhg""6mg][ b]b[ "h\]g"XYWUfUh]cbž"mci "U[ fYY"h\Uh'mci f"k cf_"]g mci f"ck b"cf][ ]bU"k cf_"$ 

⊋mci 'bYYX'gca Y'UXX]h]cbU``gi ddcfhk]h\ 'mci f`k f]h]b[ 'g\_]``gž'd`YUgY'WcbhUWh\Y'@YUfb]b[ '7 YbhfY'cf'j]Yk gca Y'cZh\Y'fYgci fWg'cb'h\Y]f`k YVg]hY. 'k k k "`Wi bgk "YXi "Ui "'H\Y'@YUfb]b[ '7 YbhfY']g'XYg][ bYX'hc'\Y`d mci ']a dfcj Y'mci f'UWUXYa]Wk f]h]b[ 'UbX'Wca a i b]WUh]cb'g\_]``g"'Gca Y'ghi XYbhg'i gY'h\Y'7 YbhfY'gYfj]W/g VYWUi gY'h\YmUfY'Z]bX]b[ 'h\Y]f'Ugg][ ba Ybhg'U'W\U``Yb[ Yžch\Yfg'VYWUi gY'h\Ymk Ubhhc']a dfcj Y'Ub'U`fYUXm gi WW/ggZ ``UWUXYa]WdYfZcfa UbW/"

# 5 WUXYa]W ⇒ Zcfa Uh]cb 7 ci fgY F Ygi `hg

 $: cf`XYfU]`g`cb`I BGK `UggYgga Ybhdc`]Whž'd`YUgY`j ]g]h`\underline{k} \underline{k} \underline{k} "gh \underline{XYbh'i} \underline{bgk} "YXi"Ui \underline{\#UggYgga Ybh}$ 

``UW_bck`YX[Y`f\Y`6YXY[U``dYcd`Y`k\c`UfY`f\Y`ffUX]f\cbU``W`gfcX]Ubg`cZf\Y``UbXg`cb`k\]W\`I_BGK og]b[fcb`WJadig`]g``cWJfYX"	