

# IEST5003

5XXfYgg]b[ '9bj ]fcb a YbhU`'ggi Yg. 'DUH\k Umg'hc '7 \Ub[ Y!  
A U\_]b[

HYfa 'H\fYY`##'&\$&\$



GWXcc``cZ< i a Ub]hYg'UbX'@Ub[ i U[ Yg``# 'I BGK ``5ftg'UbX'GcWU``GWYbWg

7ci fgY`Cj Yfj ]Yk

GhJZZ7cbhJWw8YhU]`g

7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`]m	@cW]hcb	D\cbY
@Ji fU`A W@Ji W\`Ub	`Ui fU"a WUi W\`Ub4 i bgk "YXi "Ui	VmfYei Ygh	A cfj Yb`6fck b &* -	d`YugY`i gY Ya U]`

GWcc``7cbhJWw8Zcfa Uh]cb

GWcc``cZ<i a Ub]hYg`UbX:@Jb[ i U[ Yg

@cW]hcb. `GWcc``C Z]WZ`A cfj Yb`6fck b`6i ]X]b[ ž@Yj Y``&ž&),

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D\cbY. `ž\*%&`- ' , ) `)%\* , %

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9a U]: [\U`4 i bgk "YXi "Ui](#)

7ci fgY'8YHJ]`g

7fYX]hDc]bHg`\*`

Gi a a UfmicZ`hY'7ci fgY

h`h]g`Vci fgYz`mci `k ]`cc\_`Uh\ck `mci `WUb`Udd`mi`hY`ZUa Yk cf\_g`UbX`]bg][ \hg`mci `Uj Y`[ U]bYX`]b`mci f  
dcgh[ fUXi UH`Ybj ]fcb a YbhUbX`gcWY`migh X]Yg`hc`hY`Ybj ]fcb a YbhU`]ggi Yg`mci `WfY`UVci ha cgh`H`Y  
Vci fgY`i gYg`Ub`]bhYfX]gW]d`]bUfmUddfcUW`]b`k \]W`mci `UFY`YbVci fU[ YX`hc`UH`bX`hc`hY`Vci d`Yi ]micZ  
Ybj ]fcb a YbhU`]ggi Yg`UbX`hc`XYj Y`cd`YZZYW]j Y`dfcdcgU`g`Zc`f`UW]cb`"K \]Y`hY`Vci fgY`hc`i WYg`cb`U`k ]XY  
fUb[ Y`cZ`ZUa Yk cf\_g]b]fcXi W`X`h`fci [ \ci h`mci f`dfY`W`X]b[ `Vci fgYg`z`mci `k ]`XYj Y`cd`gYj YfU`]b`[ fYUHYf  
XYd`h`]b`fYgdcbgY`hc`mci f]bhYfYg]g`UbX`Z`h`fY`WfYf`UbX`fYgYUfV`d`Ub`g`"Mci `k ]`YUfb`UVci h`hY`b`U`h`fY  
cZ`UbX`b`Y`X`Z`c`f`a`i`h`!`c`f`h`Ub`g!X]gW]d`]bUfmUddfcUW`Yg`hc`U`X`X`fY`gg]b[ `Ybj ]fcb a YbhUbX`gcWY`m`id`fc`V`Ya`g  
cZ`c`W`Z`b`U`h`c`b`U`z`U`b`X`#`f`[ `c`V`U`]a`d`c`f`U`b`W`"Mci `k ]`VY`gi`d`d`c`f`Y`X`hc`Yi`d`c`f`Y`W`U`g`Y`gh`X]Yg`UbX  
UddfcUW`Yg`h`U`h`mci`]bhY`bX`hc`Yb[ U[ Y`]b`mci f`W`Ub[ Y!a`U\_]b[ `UbX`"YUXYfg\]d`k`cf`\_`UZ`Y`f`mci`Z]b]g\`mci`f  
Vci fgYk`cf`\_`"

7ci fgY`@YUfb]b[ `Ci h`Vci a Yg

%`8Ya`cbghfUH`Ub`UXj`UbW`X`i`bXYfg]UbX]b[ `cZ`hY`Yb]Ub[ `Ya`Ybh]cZ`W`h`fU`z`dc`]h]W`!`Y`Vci`bca`]V`  
UbX`h`V`b]W`Z]W`c`fg`]b`Ybj`]fcb`a`YbhU`]ggi`Yg`  
&`Gmb`h`Yg]gY`UbX`i`gY`h`Y`c`f`Y`h]W]`UddfcUW`Yg`hc`Yj`U`i`UH`h`hY`Y`ZZY`W]j`YbYgg`cZ`Vci`bhYa`dcfUfm  
dfUW]W`g`cZYbj`]fcb`a`YbhU`]YUXYfg\]d`z`a`UbU[`Ya`YbhUbX`W`Ub[`Y!a`U\_]b[  
'`" `9i` \]V]h]W]dUV]`]m]Z`c`f`]bXYdYbXYbhUbX`Vci`UVcfU]h]Y`]bei`]fm]b]c`fYU`k`cf`X`Ybj`]fcb`a`YbhU`]ggi`Yg`  
(`8Ya`cbghfUH`Y`ZZY`W]j`Y`j`YfVU`UbX`#`f`k`f]h]b`Vci`a`a`i`b]W]h]cb`hc`U`X]j`YfgY`fUb[`Y`cZ`U`i`X]YbW`g`  
)`8Ya`cbghfUH`Ub`i`bXYfg]UbX]b[ `cZ`UbX`h`Y`UV]`]m]h`Udd`m`z`fYZYI`j`Y`UbX`fYgdcbg]V`Y`dfUW]W`g`cZ  
↑`gh]UbX`Vci`UVcfU]h]Y`YUXYfg\]d`]b`Ybj`]fcb`a`YbhUbX`gcWY`m`

HYUW]b[ `GhfUH[ ]Yg`

H\]g`Vci fgY`i gYg`Vch`]b!WUgg`X]gW`gg]cbg`UbX`"Y`W`i`fYg`z`Vci`d`Ya`Ybh`X`V`m`c`b!`]bY`Yi`W`Ub[`Y`cZ]XYUg`j`]U

# 5ggYgga Ybh

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K YY_`mF YZYW]cbg`	' \$i	Bch5dd`]WUVY	%ž&ž
7 UgY`Gh XmDfYgYbhU]cb`	&\$i	% #/\$#&\$&\$ \$*.\$\$\$'DA	' ž(
: ]bU`F Ydcfh	) \$i	&( #/\$#&\$&\$ \$*.\$\$\$'DA	%ž&ž ž)

5ggYgga Ybh8YHU]`g

5ggYgga Ybh%`K YY\_`mF YZYW]cbg`

GHUfhXUH. `Bch5dd`]WUVY

8YHU]`g.

K YY\_`mg\cfhk f]hYb`gi a a Uf]Yg`ZcfX]ghUbwW`UbX`cb!WJa di g`gh XYbhžk ]h`g\cfhcb`]bY`ZYXVUW\_[ ]j Ybž Zcf`-`k YY\_g`r &) \$`k cfXg`dYf`k YY\_`"

5XX]h]cbU`XYHU]`g.

H\fc] [ \ci h\Y`Wci fgYžmci `k ]`dfcXi W`g\cfhFYZYW]cbg`U]a YX`hc`XYdYb`mci f`Yb[ U[ Ya Ybhk ]h`k \Uh mci `Uj Y`YUfbYX`]b`hY`A 9A `UbX`hc`YbWci fU[ Y`mci `hc`XYj Y`cd`mci f`WYU]j ]hmUbX`g\_]``]b`Udd`m]b[ `mci f`YUfb]b[ g`hc`fYU`]ZY`g]h`U]cbg`"Mci `k ]`dcghmci f`fYZYW]cbg`cb`A ccX`Y`YUW`k YY\_`hY`XUmVY`Zcf`WUgg`"

Hi fb]h]b`gYh]b[ . H\]g`]g`bchU`Hi fb]h]b`Ugg][ ba Ybh

5ggYgga Ybh&.`7 UgY`Gh XmDfYgYbhU]cb`

GHUfhXUH. `

8YHU]`g.

' \$`a ]bg`WUgg`dfYgYbhU]cb`cf`ZcfX]ghUbwW`cbY`k YY\_`YUX]b[ `Ub`cb`]bY`Zcfi a ""K f]hYb[ fci d`ZYXVUW\_k ]` VY`[ ]j Yb`"

5XX]h]cbU`XYHU]`g.

H\]g`Ugg][ ba Ybhk ]`YbWci fU[ Y`mci `hc`i gY`hY`a cghfY`Yj UbhZUa Yk cf\_g`Zca `hY`dfc[ fUa `hc`UbU`mgY UbX`Yi d`]b`Ybj ]fcb`a YbhU`]gg] Y`mci `UFY`dUgg]cbUH`UVci h`Mci f[ fci d`k ]`WkccgY`cbY`cf`hk`c`fYUX]b[ g`cf`\_YmWcbWd]h`hUhmc] `Uj Y`fYU`m`c] YX`Zca `mci f`h]a Y`]b`hY`A 9A ""Mci `k ]`hYb`Udd`m]h]hc`U dUfh]W`Uf`Ybj ]fcb`a YbhU`]gg] Y`hc`g\ck`Zcfi g`\ck`]h]a U\_Yg`hUh]gg] Y`fYU`mW`a Y`hc`]ZY`"b`mci f`dfYgYbhU]cbž`mci `k ]`hYUW`i g`hY`\_YmY`Ya Ybhg`cZmci f`hYcfm`#fYUX]b[ #fUa Yk cf\_`UbX`fYZYW]cb`k \Uh]h`"

\Y`dYX'mci 'hc'gYY'jb'mci f'WUgY'ghi Xm'

Hi fb]h]b'gYh]b[ . 'H\]g']g'bchU'Hi fb]h]b'Ugg][ ba Ybh

5ggYgga Ybh' . : ]bU'F Ydcfh

GHUfhXUHy.'

8YhU]`g.











Gi Va ]gg]cb`cZ5ggYgga YbhiHUg\_g

Hi fb]h]b`Gi Va ]gg]cb

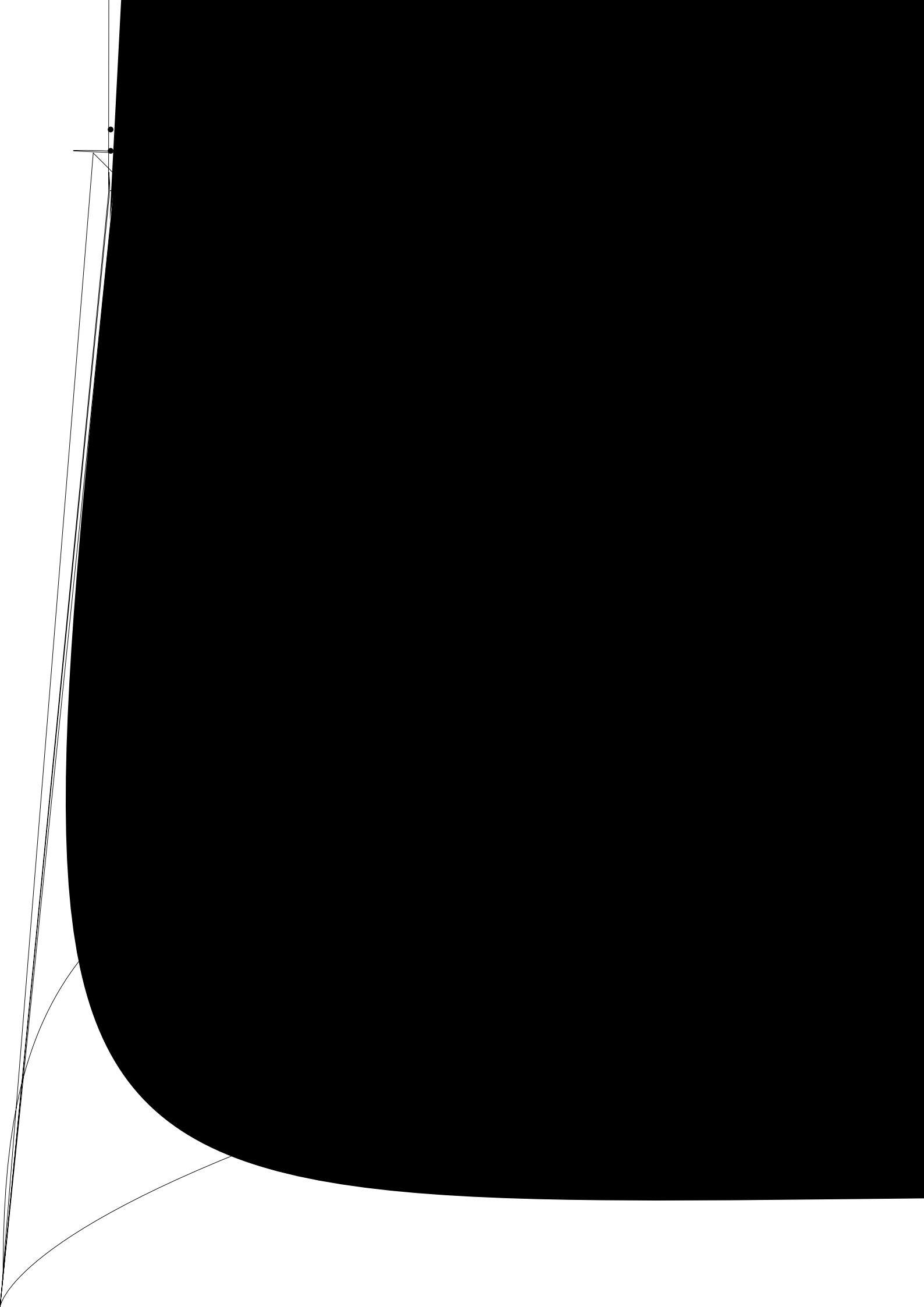
≠Zmci`YbWci bHYf`U`dfcV`Ya`k` \Yb`UHYa` dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`YbhiHfci`[`\`Hi`fb]h]bzd`YUgY`  
HY`Yd\cbY`9I`HYfbU`Gi`ddcfhcb`-`,`)`"``"``%cf`Ya`Uj`H`Ya`icb`YI`HYfbU`HY`hgi`ddcfh4`i`bgk`"YXi`"Ui`""Gi`ddcfh`  
\ci`fg`UfY`,`.\$\$Ua`-`-%\$.\$\$da`icb`k`YY`XUmg`UbX`-`.\$\$Ua`-`).\$\$da`icb`k`YY`YbXg`fI`\*)`XUmg`U`mY`UfI`≠Zmci`  
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`YbhiXi`Y`hc`U`Zi`h`k`]H`Hi`fb]h]b`mci`a`UmUdd`m`Zc`f`Ub`YI`HYbg]cb`Z`Vi`hmc`i`  
a`i`ghfYH]b`mci`f`h]W`Yhbi`a`VYf`Z`ca`9I`HYfbU`Gi`ddcfhU`cb[`k`]H`Ubmc`H`Yf`fY`Yj`UbhXcW`a`YbHg`L`hc`  
]bWi`XY`Ug`Yj`]XYbVW`hc`gi`ddcfhmc`i`f`YI`HYbg]cb`Udd`]W]h]cb`≠Zmci`Ya`Uj`9I`HYfbU`Gi`ddcfhmc`i`k`]`  
Ui`hca`U]W]m`fYW]j`Y`U`h]W`Yhbi`a`VYf`Z`Vi`h]Zmci`HY`Yd\cbY`mci`k`]`bYYX`hc`gdYW]Z]W]mUg`\_Zc`f`cbY`  
Hi`fb]h]b`U`gc`dfcj`]XYg`i`dXUH`g`cb`H`Y]f`gmgh`Ya`g`hU`h`g`cb`Hk`]HYf`"

;`YbYfU`mZ`UggYgga`YbhiUg\_g`a`i`ghVY`gi`Va`]HYX`Y`YWfcb]W]m]j`]U`Y]H`Yf`Hi`fb]h]b`cf`U`A`ccX`Y`  
Ugg][`ba`Ybhi`H`]bgHUbVW`g`k`\YfY`H`g`]g`bchidcgg]V`Y`Z`]hk`]`VY`ghUHYX`cb`mci`f`Wci`fgY`g`A`ccX`Y`g]H`k`]H`  
U`HYfbU]h]`Y`gi`Va`]gg]cb`XYH]g`"

:`cf`]bZcfa`Uh]cb`cb`\ck`hc`gi`Va`]hUgg][`ba`YbHg`cb`]bY`j`]U`A`ccX`Y`.\`hdg`#gh`XYbhi`bgk`"YXi`"Ui`b`.\`

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

D`U[ ]Uf]ga `]g`i`g]b[ `h`Y`k`c`f`X`g`c`f`]X`Y`U`g`c`Z`c`h`Y`f`g`i`U`b`X`d`f`Y`g`Y`b`h]b[ `h`Y`a` `U`g`m`c`i`f`c`k`b`" `#`W`U`b`h`U`\_`Y`a` `U`b`m`  
Z`c`f`a`g`Z`Z`c`a` `X`Y`]V`Y`f`U`H`Y` `W`X`Y`U`H]b[ `h`c`U`W`W`Y`X`Y`b`h`U`m`i`W`c`d`m]b[ `Z`c`a` `U`g`c`i`f`W`k`]h`c`i`h`U`W`b`c`k` `Y`X[ `Y`a` `Y`b`h`



5 WUXYa ]W**⊖**Zcfa Uh]cb