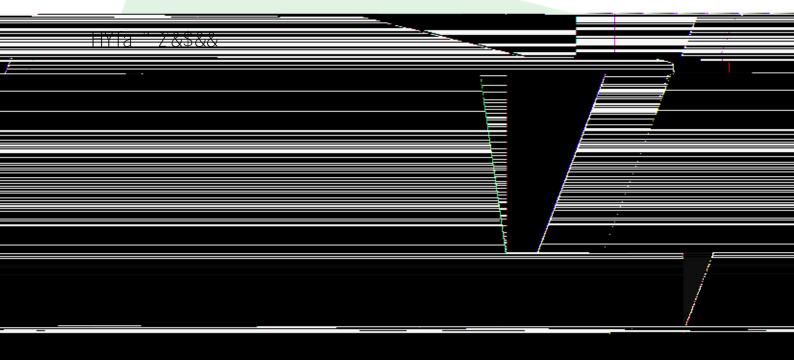
# **GSOE9740**

≠bXi glf]U``9Wc`c[miUbX'Gi glU]bUV`Y'9b[]bYYf]b[





<code>GSOE9740</code> // Term 3, 2022 // published at 24-08-2022 © UNSW Sydney, 2022

/\/ <del>[</del>]

## 7ci fgY<sup>·</sup>Cj Yfj ]Yk

## GHJZZ7cbHJWh78YHJ]`g

## 7 cbj Ybcfg

BUa Y	9a U]`		

## 7cifgY<sup>·</sup>8YHJ]`g

#### I b]hg<sup>·</sup>cZ<sup>·</sup>7 fYX]h<sup>·\* ·</sup>

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

GighU]bUV]`]hmaYUbg``]j]b[`kY```k]h\]b`h\Y``]a]hg`cZU'Z]b]hY`d`UbYh'AcfY`h\Ub`YjYfžYb[]bYYfg`bYYX`hc`Z]bX \c`]gh]WUbX`YZZYWhj`Y`gc`ih]cbg`hc`WffYbhmibgighU]bUV`Y`dfUWh]WYg`cZdfcXiWh]cb`UbX`Wcbgiadh]cbžhc

## 7cifgY`@YUfb]b[`CiHWcaYg

5ZhYfigi WWYggZ ``miWca d`Yh]b[ ih\]giWci fgYžmci ig\ci `X'VY'UV`Y'hc.

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%"'I bXYfgHUbX'H\Y'VUg]Wdf]bW]d`Yg`cZ]bXi gHf]U`'YWc`c[mUbX gi gHJ]bUV`Y'Yb[]bYYf]b['UbX'H\Y]f'Udd`]WUHcb`]b'k cf_`dfUWf]WY'UbX fYgYUfW\'UbX'Zcfa i `UHY'fYUgcbUV`Y'gi [[YgH]cbg'VUgYX'cb gi gHJ]bUV]`]miUggYgga Ybh'UWf]j ]HYg"'	

## 5ggYgga Ybh

H\YfY'k]``VY'bc'ZbU`YlUa]bUh]cb']b'h\]g'WcifgY'''+bghYUXžh\YfY'k]``VY'h\fYY'cb`]bY'ei]nnYgžk cfh\'' \$i 'cZ h\Y'hchU``WcifgY'aUf\_žcbY']bX]j]XiU``Ugg][baYbhfl\$i Ł'k]h\'Ub']bX]j]XiU``dfYgYbhUh]cb'f%\$i Ł'UbX'cbY [fcid'Ugg][baYbhfl\$i Ł''

Zmci 'UfY'i bk Y``cf`\Uj Y'ch\YfYI hYbi Uhjb[ 'WjfW a ghUbWYg'k \]W\'dfYj Ybhmci 'Zfca 'Wca d`Yhjb[ 'Ub UggYgga Ybhž'mci 'U`k Umg`\Uj Y'hc'Udd`mZcf`GdYWjU`'7 cbg]XYfUhjcb'h\fci [\`cZjWjU`'I b]j Yfg]mW\UbbY`g fVYZcfY'h\YXYUX`]bYž']Zdcgg]V`YŁ '<u>\hhdg.##gh XYbh'i bgk "YXi "Ui #gdYWjU'!Wcbg]XYfUhjcb</u>" C h\Yfk ]gY'h\Y'Zhhc! gi Va ]hfi `Y'Udd`]Ygž']"Y"'Vmg]hjb[ 'cf`gi Va ]hjb[ 'Ub'UggYgga Ybhcb'h\Y'gW\YXi `YX'UggYgga YbhXUhYž'h\Y gh XYbh]g`XYWUf]b[ 'h\Uhh\YmUfY'Z]hhc'Xc'gc'UbX'WUbbch`UhYf'Udd`mZcf'GdYWjU`'7 cbg]XYfUhjcb"

A Uf\_]b[`Wf]hYf]U. 5```Ugg][ ba Ybhg'k ]``VY'a Uf\_YX'cb'h\Y'VUg]g'cZk \Yh\Yf'h\Y'gh XYbhXYa cbghfUhYg'Ub i bXYfghUbX]b[`cZh\Y'a UhYf]U`''K \YfY'bi a Yf]WU``Yffcfg'WUb'VY`]XYbh]Z]YX'Ug'g]a d`Y'g`]dgždYbU'h]Yg'k ]``bch VY'Ug``Uf[ Y'Ug'k \Yb'Yffcfg'UddYUf'hc'VY'U'fYgi `hcZU'WcbWYdh U``a ]gi bXYfghUbX]b[ žcf'h\Y'gci fWY'cZh\Y Yffcf']g'X]ZZ]W'`hhc'XYhYfa ]bY'Zfca `h\Y'k cf\_]b[ "'H\Y'[ fci d'Ugg][ ba Ybhk ]``VY'UXX]h]cbU``mUggYggYX'k ]h fYgdYWhc'h\Y'XYdh\cZh\Y'UbU`mg]gž'h\Y'VfYUXh\cZ]ng'Wcbg]XYfUh]cb'cZh\Y'ei Ygh]cb'Uh\UbX'h\Y WUf]mcZh\Y'k Um]b'k \]W\'h\Y'Ubgk Yf`]g'dfYgYbhYX'''H\Y'i gY'cZhUY'Yg'UbX'X]U[ fUa g']g'YbWci fU[ YX''A U\_Y gi fY'mci `Xc'bchYI WYYX'h\Y']a dcgYX'dU[ Y``]a ]ng''

DYbU'h]Yg'Zcf``UhY'gi Va ]gg]cbg'cZU```Ugg][ ba Ybhg`Udd`m"'K \YfY`Udd`]WUV`Y`fbyY'HUV`Y`VY`ck Łž``UhY'k cf\_ k ]```VY'dYbU`]gYX`Uh'h\Y`fUhY`cZ)ı `dYf`XUmUZhYf'h\Y`Xi Y'h]a Y`UbX`XUhY`\Uj Y`YI d]fYX"`H\YfY`]g'bc YI hYbg]cb`Zcf'ei ]nnYg"

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	5ggYgga Ybh	C fU``dfYgYbHJHjcb	
K_YY_`, .`' %`C WtcVYf'!`( Bcj Ya VYf	@YWhifY	DfUWMJWU``hcc`g`UbX`acXY`g.`Hf]d`Y`6chhca`@]bY hcc``Zcf`h\Y`kUhYf`]bXighfm	
	K cf_g\cd	5gg][ba Ybh' 'Vf]YZ]b[ / &bX 'C b`]bY 'E i ]n	
K YY_``+`Bcj Ya VYf`! ‰Bcj Ya VYf	@YWhifY	5XjUbWYX`UbU`mh]WU``hYW\b]eiYg`cZ=bXighf]U` 9W£`c[mi≕f\mVf]X`@75Ł	
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K YY_`%\$.`%( `Bcj Ya VYf !`% `Bcj Ya VYf	@YWhifY	=bXigHf]U``9Wc`c[mDfUWf]WY fl@ <b>]jY</b> `Cb`]bY`KYV]bUfžUHHYbXUbWY`Wcadi`gcfmŁ	
	K cf_g\cd	< m\/f]X`@7 5`YI YfW]gY/ 5gg][ ba Ybh' `Xi Y	
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## FYgci fWfg

#### DfYgWf]VYX F Ygci fWfg

5```a UhYf]U``fYei]fYX`Zcf`h\]g`WcifgY`k]```VY`dfcj]XYX`cb`LBGK `AccX`Y"`∔i]g`Wcadi`gcfmZcf`U```ghiXYbhg`hc UWWYgg`h\]g`fYgcifWY.`<u>\hhdg.##accX`Y"hY`h'ibgk"YXi"Ui#c[]b#bXYL"d\d</u>

#### FYWca a YbXYX<sup>-</sup>FYgci fWYg

#### HYI hVcc\_UbX FYUX]b[g

H\YfY`]g`bchWca di`gcfmhYl h/cc\_'Zcf`h\]g'Wci fgY"'<ck Yj Yfž`k Y`ghfcb[`mfYWca a YbX`h\Y`Zc``ck ]b[`hk c.

• <u>\htd.##gW&c`Uf"[cc[`Y"Wca</u>`

5DD9B8±

#### 8YZ]b]h]cb`cZ`ŧbXighf]U``9Wc`c[m

€xighf]U``YWc`c[m]g`U`fUd]X`m[fck]b[`Z]Y`X`h\Uh`gmghYaUh]WU``miYIUa]bYg``cWU`ž`fY[]cbU``UbX`[`cVU`

## Gi Va ]gg]cb cZ5ggYgga YbhHUg\_g

D`YUgY`fYZYf`hc`h\Y`A ccX`Y`dU[Y`cZh\Y`Wci fgY`Zcf`Z fh\Yf`[i]XUbWY`cb`UggYgga Ybhigi Va]gg]cb"

#### I BGK `\Ug'U'gHUbXUfX``UhY'gi Va ]gg]cb'dYbU`hmcZ

 )ı 'dYf'XUmž'Zcf'U``UggYgga Ybhg'k \YfY'U'dYbU'miUdd`]Ygž'WUddYX'Uh'Z]j Y'XUmg'f%&\$'\ci fgŁz'UZhYf k \]W\'U'ghi XYbh'WUbbchigi Va ]hUb'UggYgga Ybhž'UbX'bc'dYfa ]hhYX'j Uf]Uh]cb"

## 5WUXYa]W=bZcfaUh]cb

#### : ]bU`'9I Ua ]bUh]cbg.

: ]bU`YI Ua g`]b`H' `&\$&&`k ]``VY`\Y`X`cb`]bY`VYIk YYb`&) h\`B cj Ya VYf`!`, h\`8YWYa VYf`&\$&&`]bWi g]j Yž'UbX gi dd`Ya YbHJfm`YI Ua g`VYIk YYb`- h\`!`% h\`>Ubi Ufm&\$&' `]bWi g]j Y"`Nci `UfY`fYei ]fYX`hc`VY`Uj U]`UV`Y`cb h\YgY`XUHYg"`D`YUgY`Xc`bchhc`a U\_Y`UbmdYfgcbU``cf`HUj Y``UffUb[ Ya Ybhg`Xi f]b[`h\]g`dYf]cX"'

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## 5ddYbX]I. '9b[]bYYfg'5ighfU`]U'f195ŁDfcZYgg]cbU`'9b[]bYYf'7cadYhYbWm GHJbXUfX

Dfc[fUa +bhybXYX @YUfb]b[ Cihwca Yq ? bck `YX[ Y 'UbX'q\_]``'VUqY D9%"%7cadfY\Ybq]iYžh\YcfmVUqYXibXYfqHUbX]b[cZh\YibXYfd]bb]b[bUhifU`UbX d/mg]WU`:gW]YbWYg`UbX`h\Y`Yb[]bYYf]b[`Z bXUa YbHU`g`Udd`]WUV`Y`hc`h\Y`Yb[]bYYf]b[`X]gW]d`]bY D9%"& 7 cbW/dhiU`i bXYfqHUbX]b[ cZh\Y`a Uh\Ya Uh\Wažbi a Yf]WU`UbU`mg]qžqHUh|qh\WažUbX Weadi hYf'UbX']bZcfaUh]cb'gW]YbWYg'k\]WX'i bXYfd]b'h\Y'Yb[]bYYf]b['X]gW[d`]bY D9%" + + XYdh i bXYfqHbX]b[ cZqdYWU`]qhVcX]YqcZ bck YX[Yk]h bhY'Yb[]bYYf]b[ X]qWd`]bY D9%"('8]qWFfba YbhcZ\_bck YX[YXY]Ycda YbhUbXfYqYUfWXX]fYWfcbg'k ]h.jb'h.Y Yb[]bYYf]b[`X]gWJd`]bY D9%") ? bck `YX[Y`cZYb[]bYYf]b[ `XYg][b`dfUW]WY`UbX`WcbhYl hi U``ZJW/cfg`]a dUWf]b[ `h\Y Yb[]bYYf]b['X]qW[d`]bY D9%"\* I bXYfqHJbX]b[ cZh\Y'qWcdYždf]bW]dYgžbcfa gžUWVci bHJV]]]h]Yg'UbX'Vci bXg'cZ qi qHU]bUV`Y`Yb[]bYYf]b[`dfUWfWY`]b`H\Y`qdYW[Z]WX]qW[d`]bY 9b[]bYYf]b['Udd`]WUh]cb'UV]`]m D9&"%5dd`]WUhjcb`cZYghUV`]g\YX'Yb[]bYYf]b[`a Yh\cXg`hc`Wca d`YI 'Yb[]bYYf]b[`dfcV`Ya qc`i]b[ D9&"&: `i YbhUdd`]WUhcb'cZYb[]bYYf]b[ 'hYWkb]ei Ygžhcc`g'UbX'fYgci fWfg D9&" 5dd`]WUhjcb`cZgmghYa UhjWYb[]bYYf]b[`gmbh\Yg]g`UbX`XYg][b`dfcWYggYg D9&"( '5dd`]WUHcb'cZgmghYaUHWUddfcUWXYg'hc'h\Y'WcbXiWiUbX'aUbU[YaYbhcZYb[]bYYf]b[ dfc Y₩q DfcZYgg]cbU`UbX dYfgcbU`Uhf]Vi hYg D9' "%'9h\]WU``WcbXi WiUbX'dfcZygg]cbU``UVWci bHUV]`]hm D9' "&'9ZYW)j Y'cfU`'UbX'k f]HYb'Wca a i b]WUh]cb']b'dfcZygq]cbU`'UbX'`UmXca U]bg D9' "' 7 fYUhi Yžibbci Uhi YUbX dfc!UWi YXYa YUbci f D9' "( DfcZygg]cbU`i gY'UbX'a UbU[ Ya YbhcZ]bZcfa Uhcb D9' ") CfXYfma UbU[Ya YbhcZgYZzUbX dfcZygq]cbU`WcbXi Wh D9' "\* 9ZYWAJ Y HYUa 'a Ya VYfg\]d UbX HYUa 'YUXYfg\]d