Appendix A

OpenGL Commands and Their IRIS GL Equivalents

Table A-1 contains a list of equivalent calls that you might find useful while porting. The first column is an alphabetical list of IRIS GL calls, the second column contains the corresponding calls to use with OpenGL, and the third column contains pointers to any relevant discussion in the text.

Note: In many cases the OpenGL commands listed will function somewhat differently from the IRIS GL commands, and the parameters may be different as well.

Be sure to refer to the OpenGL man pages in the *OpenGL Reference Manual* for detailed descriptions of the functions of the these commands and the parameters they take.

You might also need to refer to X or IRIS IM documentation; some appropriate X and IRIS IM manuals are listed in the Introduction to this book.

Table A-1 IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
acbuf()	glAccum()	"Accumulation Buffer Calls" on page 63
acsize()	glXChooseVisual()	"Accumulation Buffer Calls" on page 63
addtopup()	use X or IRIS IM for menus	Chapter 5, glXIntro man page, X documentation, IRIS IM documentation
afunction()	glAlphaFunc()	"afunction() test functions" on page 61

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
arc()	gluPartialDisk()[a]	"Editing toogl Output: An Example" on page 13 and "Arcs and Circles" on page 42
backbuffer()	glDrawBuffer(GL_BACK)	
backface()	glCullFace(GL_BACK)	
bbox2()	not supported	"Porting bbox2() Calls" on page 66
bgnclosedline()	glBegin(GL_LINE_LOOP)	"bgn/end Commands" on page 31 and "Lines" on page 35
bgncurve()	gluBeginCurve()	"NURBS Curves" on page 54
bgnline()	glBegin(GL_LINE_STRIP)	"bgn/end Commands" on page 31 and "Lines" on page 35
bgnpoint()	glBegin(GL_POINTS)	"bgn/end Commands" on page 31 and "Points" on page 34
bgnpolygon()	glBegin(GL_POLYGON)	"bgn/end Commands" on page 31, "Polygons and Quadrilaterals" on page 36 and "Tessellated Polygons" on page 40
bgnqstrip()	glBegin(GL_QUAD_STRIP)	"bgn/end Commands" on page 31 and "Polygons and Quadrilaterals" on page 36
bgnsurface()	gluBeginSurface()	"NURBS Surfaces" on page 55
bgntmesh()	glBegin(GL_TRIANGLE_STRIP)	"bgn/end Commands" on page 31 and "Triangles" on page 41

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
bgntrim()	gluBeginTrim()	"Trimming Curves" on page 55
blankscreen()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
blanktime()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
blendfunction()	glBlendFunc()	"Blending" on page 60
blink()	use auxiliary library or X for color maps	"Using Color-Index Mode" on page 106 or Chapter 5 and glXIntro man page
blkqread()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
c()	glColor()	"Porting Color, Shading, and Writemask Commands" on page 44
callfunc()	not supported	"Porting Display Lists" on page 65
callobj()	glCallList()	"bgn/end Commands" on page 31 and "Porting Display Lists" on page 65
charstr()	glCallLists()a	"Fonts and Strings" on page 111
chunksize()	not needed	"Porting Display Lists" on page 65
circ()	gluDisk()	"Arcs and Circles" on page 42

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
clear()	glClear(GL_COLOR_BUFFER_BIT)	"Windowing, Device, and Event Calls" on page 10 and "Porting Screen and Buffer Clearing Commands" on page 20
clearhitcode()	not supported	"Porting Picking Calls" on page 84
clipplane()	glClipPlane()	"Clipping Planes" on page 29
clkon()	XChangeKeyboardControl()	see X documentation
clkoff()	XChangeKeyboardControl()	see X documentation
closeobj()	glEndList()	"Porting Display Lists" on page 65
cmode()	auxInitDisplayMode() or glXChooseVisual()	"Using Color-Index Mode" on page 106 or Chapter 5 and glXIntro and glXChooseVisual() man pages
cmov(), cmov2()	glRasterPos3()[a], glRasterPos2()[a]	"Porting Pixel Operations" on page 47
color()	glIndex()	"bgn/end Commands" on page 31 and "Porting Color, Shading, and Writemask Commands" on page 44
compactify()	not needed	"Porting Color, Shading, and Writemask Commands" on page 44
concave()	gluBeginPolygon()[a]	

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
cpack()	glColor()[a]	"bgn/end Commands" on page 31 and "Porting Color, Shading, and Writemask Commands" on page 44
crv()	not supported	"Porting Curve and Surface Commands" on page 53
crvn()	not supported	"Porting Curve and Surface Commands" on page 53
curorigin()	use X for cursors	Chapter 5, glXIntro man page, X documentation
cursoff()	use X for cursors	Chapter 5, glXIntro man page, X documentation
curson()	use X for cursors	Chapter 5, glXIntro man page, X documentation
curstype()	use X for cursors	Chapter 5, glXIntro man page, X documentation
curvebasis()	glMap1()	"Porting Curve and Surface Commands" on page 53
curveit()	glEvalMesh1()	"Porting Curve and Surface Commands" on page 53
curveprecision()	not supported	"Porting Curve and Surface Commands" on page 53
cyclemap()	use auxiliary library or X for color maps	"Using Color-Index Mode" on page 106 or Chapter 5 and glXIntro man page

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
czclear()	glClear(GL_COLOR_BUFFER_BIT | GL_DEPTH_BUFFER_BIT)	"Porting Screen and Buffer Clearing Commands" on page 20
dbtext()	not supported	Dial and Button Box documentation
defbasis()	glMap1()	"Porting Curve and Surface Commands" on page 53
defcursor()	use X for cursors	Chapter 5, glXIntro man page, X documentation
deflinestyle()	glLineStipple()	"Lines" on page 35 and "Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69
defpattern()	glPolygonStipple()	"Polygons and Quadrilaterals" on page 36 and "Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69
defpup()	use X for menus	Chapter 5, glXIntro man page, X documentation
defrasterfont()	glXUseXFont()[a]	"Fonts and Strings" on page 111
delobj()	glDeleteLists()	"Porting Display Lists" on page 65
deltag()	not supported	"Porting Display Lists" on page 65
depthcue()	glFog()[a]	"Porting Depth Cueing and Fog Commands" on page 49

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
dglclose()	not needed—OpenGL is network transparent	
dglopen()	not needed—OpenGL is network transparent	
dither()	glEnable(GL_DITHER)	"Porting Color, Shading, and Writemask Commands" on page 44
dopup()	use X for menus	Chapter 5, glXIntro man page, X documentation
doublebuffer()	auxInitDisplayMode() or glXChooseVisual()	"Porting Display Mode Initialization Calls with auxInitDisplayMode()" on page 96 or Chapter 5 and glXIntro man page
draw()	glBegin(GL_LINES)[a]	"Porting Commands that Required Current Graphics Position" on page 19 and "Lines" on page 35
drawmode()	glXMakeCurrent()[a]	
editobj()	not supported	"Porting Display Lists" on page 65
endclosedline()	glEnd()	"bgn/end Commands" on page 31 and "Lines" on page 35
endcurve()	gluEndCurve()	"Porting Curve and Surface Commands" on page 53
endfeedback()	glRenderMode(GL_RENDER)	"Porting Feedback Calls" on page 90
endfullscreen()	not supported	

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
endline()	glEnd()	"bgn/end Commands" on page 31
endpick()	glRenderMode(GL_RENDER)	"Porting Picking Calls" on page 84
endpoint()	glEnd()	"bgn/end Commands" on page 31 and "Points" on page 34
endpolygon()	glEnd()	"bgn/end Commands" on page 31 and "Polygons and Quadrilaterals" on page 36
endpupmode()	use X for menus	Chapter 5, glXIntro man page, X documentation
endqstrip()	glEnd()	"bgn/end Commands" on page 31 and "Polygons and Quadrilaterals" on page 36
endselect()	glRenderMode(GL_RENDER)	"Porting Picking Calls" on page 84
endsurface()	gluEndSurface()	"NURBS Surfaces" on page 55
endtmesh()	glEnd()	"bgn/end Commands" on page 31 and "Triangles" on page 41
endtrim()	gluEndTrim()	"Trimming Curves" on page 55
feedback()	glFeedbackBuffer()	"Porting Feedback Calls" on page 90
finish()	glFinish()	
fogvertex()	glFog()	"Porting Depth Cueing and Fog Commands" on page 49

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
font()	see glListBase()	
foreground()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
freepup()	use X for menus	Chapter 5, glXIntro man page, X documentation
frontbuffer()	glDrawBuffer(GL_FRONT)	
frontface()	see glCullFace()	
fudge()	use auxiliary library or X for windowing	
fullscrn()	not supported	
gammaramp()	use auxiliary library or X for color maps	"Using Color-Index Mode" on page 106 or Chapter 5 and glXIntro man page
gbegin()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
gconfig()	no equivalent (not needed)	"Porting Display Mode Initialization Calls with auxInitDisplayMode()" on page 96 or Chapter 5 and glXIntro man page
genobj()	glGenLists()	"Porting Display Lists" on page 65
gentag()	not supported	"Stencil Plane Calls" on page 64
getbackface()	glGet()	"Porting IRIS GL 'Get' Commands" on page 18
getbuffer()	glGet()	"Porting IRIS GL 'Get' Commands" on page 18

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
getbutton()	use auxiliary library or X for windowing	"Porting IRIS GL 'Get' Commands" on page 18, "Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5, and glXIntro man page
getcmmode()	glXGetCurrentContext()	"Porting IRIS GL 'Get' Commands" on page 18, Chapter 5 and "Porting Color, Shading, and Writemask Commands" on page 44
getcolor()	glGet()	
getcpos()	glGet()	"Porting IRIS GL 'Get' Commands" on page 18
getcursor()	not supported	"Porting IRIS GL 'Get' Commands" on page 18
getdcm()	glIsEnabled()	"Porting IRIS GL 'Get' Commands" on page 18 and "Porting Depth Cueing and Fog Commands" on page 49
getdepth()	glGet()	"Porting IRIS GL 'Get' Commands" on page 18
getdescender()	use X for fonts	"Fonts and Strings" on page 111 and "Porting IRIS GL 'Get' Commands" on page 18
getdev()	not supported	"Porting IRIS GL 'Get' Commands" on page 18
getdisplaymode()	glGet()	"Porting IRIS GL 'Get' Commands" on page 18
	glXGetCurrentContext()	

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
getdrawmode()	glXGetCurrentContext()	"Porting IRIS GL 'Get' Commands" on page 18
getfont()	use X for fonts	"Porting IRIS GL 'Get' Commands" on page 18 and "Fonts and Strings" on page 111
getgdesc()	glGet(), glXGetConfig(), glXGetCurrentContext(), glXGetCurrentDrawable()	"Porting IRIS GL 'Get' Commands" on page 18
getgpos()	not supported	"Porting Commands that Required Current Graphics Position" on page 19 and "Porting IRIS GL 'Get' Commands" on page 18
getheight()	use X for fonts	"Fonts and Strings" on page 111 and "Porting IRIS GL 'Get' Commands" on page 18
gethitcode()	not supported	"Porting Picking Calls" on page 84 and "Porting IRIS GL 'Get' Commands" on page 18
getlsbackup()	not supported	"Lines" on page 35 and "Porting IRIS GL 'Get' Commands" on page 18
getlsrepeat()	glGet()	"Porting IRIS GL 'Get' Commands" on page 18 and "Lines" on page 35
getlstyle()	glGet()	"Porting IRIS GL 'Get' Commands" on page 18 and "Lines" on page 35

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
getlwidth()	glGet()	"Porting IRIS GL 'Get' Commands" on page 18 and "Lines" on page 35
getmap(void)	not supported	"Porting IRIS GL 'Get' Commands" on page 18, Chapter 5 and "Porting Color, Shading, and Writemask Commands" on page 44
getmatrix()	glGet(GL_MODELVIEW_MATRIX), glGet(GL_PROJECTION_MATRIX)	"Porting IRIS GL 'Get' Commands" on page 18 and "Porting Matrix and Transformation Calls" on page 22
getmcolor()	not supported	"Porting IRIS GL 'Get' Commands" on page 18, "Porting Color, Shading, and Writemask Commands" on page 44, "Using Color-Index Mode" on page 106, or Chapter 5 and glXIntro man page
getmmode()	glGet(GL_MATRIX_MODE)	"Porting IRIS GL 'Get' Commands" on page 18 and "Porting Matrix and Transformation Calls" on page 22
getmonitor()	not supported	"Porting IRIS GL 'Get' Commands" on page 18
getnurbsproperty()	gluGetNurbsProperty()	"Porting IRIS GL 'Get' Commands" on page 18

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
getopenobj()	not supported	"Porting Display Lists" on page 65 and "Porting IRIS GL 'Get' Commands" on page 18
getorigin()	use auxiliary library or X for windowing	"Porting IRIS GL 'Get' Commands" on page 18 and "Windowing" on page 96, or Chapter 5 and glXIntro man page
getpattern()	glGetPolygonStipple()	"Porting IRIS GL 'Get' Commands" on page 18 and "Polygons and Quadrilaterals" on page 36
getplanes()	glGet(GL_RED_BITS), glGet(GL_GREEN_BITS), glGet(GL_BLUE_BITS)	"Porting IRIS GL 'Get' Commands" on page 18
getport()	use auxiliary library or X for windowing	"Porting IRIS GL 'Get' Commands" on page 18, "Windowing" on page 96 or Chapter 5 and glXIntro man page
getresetls()	not supported	"Lines" on page 35 and "Porting IRIS GL 'Get' Commands" on page 18
getscrbox()	not supported	"Porting IRIS GL 'Get' Commands" on page 18 and "Viewports, Screenmasks, and Scrboxes" on page 28
getscrmask()	glGet(GL_SCISSOR_BOX)	"Porting IRIS GL 'Get' Commands" on page 18 and "Viewports, Screenmasks, and Scrboxes" on page 28

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
getshade()	glGet(GL_CURRENT_INDEX)	"Porting IRIS GL 'Get' Commands" on page 18
getsize()	use auxiliary library or X for windowing	"Porting IRIS GL 'Get' Commands" on page 18, "Windowing" on page 96 or Chapter 5 and glXIntro man page
getsm()	glGet(GL_SHADE_MODEL)	"Porting IRIS GL 'Get' Commands" on page 18 and "Porting Color, Shading, and Writemask Commands" on page 44
getvaluator()	use auxiliary library or X for event handling	"Porting IRIS GL 'Get' Commands" on page 18, "Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
getvideo()	not supported	"Porting IRIS GL 'Get' Commands" on page 18
getviewport()	glGet(GL_VIEWPORT)	"Porting IRIS GL 'Get' Commands" on page 18 and "Viewports, Screenmasks, and Scrboxes" on page 28
getwritemask()	glGet(GL_INDEX_WRITEMASK)	"Porting IRIS GL 'Get' Commands" on page 18 and "Porting Color, Shading, and Writemask Commands" on page 44
getwscrn()	use auxiliary library or X for windowing	"Porting IRIS GL 'Get' Commands" on page 18 and "Windowing" on page 96 or Chapter 5 and glXIntro man page

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
getzbuffer()	glIsEnabled(GL_DEPTH_TEST)	"Porting IRIS GL 'Get' Commands" on page 18
gexit()	use auxiliary library or X for windowing	
gflush()	glFlush()	
ginit()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
glcompat()	not supported	
greset()	not supported	"Porting greset()" on page 16
gRGBcolor()	glGet(GL_CURRENT_ RASTER_COLOR)	"Porting Color, Shading, and Writemask Commands" on page 44
gRGBcursor()	use X for cursors	Chapter 5, glXIntro man page, X documentation
gRGBmask()	glGet(GL_COLOR_WRITEMASK)	"Porting Color, Shading, and Writemask Commands" on page 44
gselect()	glSelectBuffer()	
gsync()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
gversion()	glGetString(GL_RENDERER)[a]	Chapter 5 and glXIntro man page
iconsize()	use X	see X documentation for XIconSize()
icontitle()	use X	see X documentation for XSetIconName()

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
imakebackground()	use the auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
initnames()	glInitNames()	
ismex()	not supported	"Porting IRIS GL 'Get' Commands" on page 18
isobj()	glIsList()	"Porting Display Lists" on page 65
isqueued()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
istag()	not supported	"Stencil Plane Calls" on page 64
keepaspect()	use the auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
lampoff()	not supported	see X documentation for XChangeKeyboardControl()
lampon()	not supported	see X documentation for XChangeKeyboardControl()
linesmooth()	glEnable(GL_LINE_SMOOTH)	"Lines" on page 35 and "Antialiasing Calls" on page 62
linewidth()	glLineWidth()	"Lines" on page 35
linewidthf()	glLineWidth()	"Lines" on page 35

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
lmbind()	glEnable(GL_LIGHTING) glEnable(GL_LIGHTi)	"bgn/end Commands" on page 31, "Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69, and "Porting Lighting and Materials Calls" on page 70
lmcolor()	glColorMaterial()	"Porting Lighting and Materials Calls" on page 70
lmdef()	glMaterial() glLight() glLightModel()	"Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69 and "Porting Lighting and Materials Calls" on page 70
loadmatrix()	glLoadMatrix()	"Porting Matrix and Transformation Calls" on page 22
loadname()	glLoadName()	"Porting Picking Calls" on page 84
logicop()	glLogicOp()	"Porting Pixel Operations" on page 47
lookat()	gluLookAt()[a]	"Porting Matrix and Transformation Calls" on page 22
lrectread()	glReadPixels()	"Porting Pixel Operations" on page 47
lrectwrite(])	glDrawPixels()	"Porting Pixel Operations" on page 47
lRGBrange()	not supported, see glFog()	"Porting Depth Cueing and Fog Commands" on page 49

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
lsbackup()	not supported	"Lines" on page 35
lsetdepth()	glDepthRange()	"Porting Depth Cueing and Fog Commands" on page 49
lshaderange()	not supported, see glFog()	"Porting Depth Cueing and Fog Commands" on page 49
lsrepeat()	glLineStipple()	"Lines" on page 35
makeobj()	glNewList()	"Porting Display Lists" on page 65
maketag()	not supported	"Stencil Plane Calls" on page 64
mapcolor()	auxSetOneColor() or XStoreColor()	"Using Color-Index Mode" on page 106 and Chapter 5
mapw()	gluProject()	"Porting Matrix and Transformation Calls" on page 22
maxsize()	use the auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
minsize()	use the auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
mmode()	glMatrixMode()	"Porting Matrix and Transformation Calls" on page 22
move()	not supported	"Porting Commands that Required Current Graphics Position" on page 19

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
mswapbuffers()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
multimap()	use the auxiliary library or X for color maps	"Porting Color, Shading, and Writemask Commands" on page 44, also "Using Color-Index Mode" on page 106 or Chapter 5 and glXIntro man page
multmatrix()	glMultMatrix()	
n3f()	glNormal3fv()	"bgn/end Commands" on page 31
newpup()	use X for menus	Chapter 5, glXIntro man page, X documentation
newtag()	not supported	"Porting Display Lists" on page 65
nmode()	glEnable(GL_NORMALIZE)	
noborder()	use the auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
noise()	use the auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
noport()	use X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
normal()	glNormal3fv()	
nurbscurve()	gluNurbsCurve()[a]	"NURBS Curves" on page 54 and "Trimming Curves" on page 55

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
nurbssurface()	gluNurbsSurface()[a]	"NURBS Surfaces" on page 55
objdelete()	not supported	"Stencil Plane Calls" on page 64
objinsert()	not supported	"Stencil Plane Calls" on page 64
objreplace()	not supported	"Porting Display Lists" on page 65
onemap()	use the auxiliary library or X for color maps	"Porting Color, Shading, and Writemask Commands" on page 44 and "Using Color-Index Mode" on page 106 or Chapter 5 and glXIntro man page
ortho()	glOrtho()	"Porting Matrix and Transformation Calls" on page 22
ortho2()	gluOrtho2D()	"Porting Matrix and Transformation Calls" on page 22
overlay()	use X	Chapter 5 and glXIntro man page, also glXChooseVisual()
pagecolor()	not supported	
passthrough()	glPassThrough()	"Porting Feedback Calls" on page 90
patch()	glEvalMesh2()[a]	"Porting Curve and Surface Commands" on page 53
patchbasis()	glMap2()[a]	"Porting Curve and Surface Commands" on page 53

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
patchcurves()	glMap2()[a]	"Porting Curve and Surface Commands" on page 53
patchprecision()	not supported	"Porting Curve and Surface Commands" on page 53
pclos()	not supported, see glEnd()	"Porting Commands that Required Current Graphics Position" on page 19 and "Polygons and Quadrilaterals" on page 36
pdr()	not supported, see glVertex()	"Porting Commands that Required Current Graphics Position" on page 19 and "Polygons and Quadrilaterals" on page 36
perspective()	gluPerspective()	"Porting Matrix and Transformation Calls" on page 22
pick()	gluPickMatrix()[a] and glRenderMode(GL_SELECT)	"Porting Picking Calls" on page 84
picksize()	gluPickMatrix()	"Porting Matrix and Transformation Calls" on page 22 and "Porting Picking Calls" on page 84
pixmode()	glPixelTransfer() and glPixelStore()	"Porting Pixel Operations" on page 47
pmv()	not supported, see glBegin() and glVertex()	"Porting Commands that Required Current Graphics Position" on page 19 and "Polygons and Quadrilaterals" on page 36

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
pnt()	glBegin(GL_POINTS)[a]	"Points" on page 34
pntsize()	glPointSize()	"Points" on page 34
pntsizef()	glPointSize()	"Points" on page 34
pntsmooth()	glEnable(GL_POINT_SMOOTH)	"Points" on page 34 and "Antialiasing Calls" on page 62
polarview()	not supported, see glRotate() and glTranslate()	"Porting Matrix and Transformation Calls" on page 22
polf()	not supported	"Polygons and Quadrilaterals" on page 36
poly()	not supported	"Polygons and Quadrilaterals" on page 36
polymode()	glPolygonMode()	"Polygons and Quadrilaterals" on page 36
polysmooth()	glEnable(GL_POLYGON_SMOOTH)	"Antialiasing Calls" on page 62
popattributes()	glPopAttrib()	
popmatrix()	glPopMatrix()	"Porting Matrix and Transformation Calls" on page 22
popname()	glPopName()	"Porting Picking Calls" on page 84
popviewport()	glPopAttrib()	"Viewports, Screenmasks, and Scrboxes" on page 28

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
prefposition()	use auxiliary library or X for windowing	"Replacing prefposition() with auxInitPosition()" on page 96 or Chapter 5 and glXIntro man page
prefsize()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
pupmode()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
pushattributes()	glPushAttrib()	
pushmatrix()	glPushMatrix()	"Porting Matrix and Transformation Calls" on page 22
pushname()	glPushName()	"Porting Picking Calls" on page 84
pushviewport()	glPushAttrib(GL_VIEWPORT)	"Viewports, Screenmasks, and Scrboxes" on page 28
pwlcurve()	gluPWLCurve()	"Trimming Curves" on page 55
qcontrol()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
qdevice()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
qenter()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
qgetfd()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
qread()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
qreset()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
qtest()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
rcrv()	not supported	"Porting Curve and Surface Commands" on page 53
rcrvn()	not supported	"Porting Curve and Surface Commands" on page 53
rdr()	not supported	"Porting Commands that Required Current Graphics Position" on page 19

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
readdisplay()	not supported	
readRGB()	not supported	"Porting Pixel Operations" on page 47
readsource()	glReadBuffer()	"Porting Pixel Operations" on page 47
rect()	see glRect() and glPolygonMode()	"Polygons and Quadrilaterals" on page 36
rectf()	glRect()	"Polygons and Quadrilaterals" on page 36
rectcopy()	glCopyPixels()	"Porting Pixel Operations" on page 47
rectread()	glReadPixels()	"Porting Pixel Operations" on page 47
rectwrite()	glDrawPixels()	"Porting Pixel Operations" on page 47
rectzoom()	glPixelZoom()	"Porting Pixel Operations" on page 47
resetls()	not supported	"Lines" on page 35
reshapeviewport()	not supported	"Handling Redraw Events" on page 99 or Chapter 5 and glXIntro man page
RGBcolor()	glColor()	"bgn/end Commands" on page 31 and "Porting Color, Shading, and Writemask Commands" on page 44
RGBcursor()	use X for cursors	Chapter 5, glXIntro man page, X documentation

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
RGBmode()	use auxiliary library or X for windowing	"Porting Display Mode Initialization Calls with auxInitDisplayMode()" on page 96 or Chapter 5 and glXIntro man page
RGBrange()	not supported	
RGBwritemask()	glColorMask()	"Porting Color, Shading, and Writemask Commands" on page 44
ringbell()	not supported	see X documentation for XBell()
rmv()	not supported	"Porting Commands that Required Current Graphics Position" on page 19
rot()	glRotate()	"Porting Matrix and Transformation Calls" on page 22
rotate()	glRotate()	"Porting Matrix and Transformation Calls" on page 22
rpatch()	not supported	"Porting Curve and Surface Commands" on page 53
rpdr()	not supported	"Porting Commands that Required Current Graphics Position" on page 19 and "Polygons and Quadrilaterals" on page 36

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
rpmv()	not supported	"Porting Commands that Required Current Graphics Position" on page 19 and "Polygons and Quadrilaterals" on page 36
sbox()	glRect()a	"Polygons and Quadrilaterals" on page 36
scale()	glScale()	"Porting Matrix and Transformation Calls" on page 22
sclear()	glClear(GL_STENCIL_BUFFER_BIT)	"Porting Screen and Buffer Clearing Commands" on page 20 and "Stencil Plane Calls" on page 64
scrbox()	not supported	"Viewports, Screenmasks, and Scrboxes" on page 28
screenspace()	not supported	"Porting Matrix and Transformation Calls" on page 22
scrmask()	glScissor()	"Viewports, Screenmasks, and Scrboxes" on page 28
scrnattach()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
scrnselect()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
scrsubdivide()	not supported	

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
select()	glRenderMode()	"Porting Picking Calls" on page 84
setbell()	not supported	see X documentation for XChangeKeyboardControl()
setcursor()	use X for cursors	Chapter 5, glXIntro man page and X documentation
setdblights()	not supported	dial and button box documentation
setdepth()	glDepthRange()[a]	
setlinestyle()	glLineStipple()	"Lines" on page 35 and "Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69
setmap()	use auxiliary library or X for color maps	"Porting Color, Shading, and Writemask Commands" on page 44 and "Using Color-Index Mode" on page 106 or Chapter 5 and glXIntro man page
setmonitor()	not supported	
setnurbsproperty()	gluNurbsProperty()	
setpattern()	glPolygonStipple()	"Polygons and Quadrilaterals" on page 36 and "Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
setpup()	use X for menus	Chapter 5, glXIntro man page, X documentation
setvaluator()	use X for devices	Chapter 5, glXIntro man page, X documentation
setvideo()	not supported	
shademodel()	glShadeModel()	"Porting Color, Shading, and Writemask Commands" on page 44
shaderange()	glFog()	
singlebuffer()	use auxiliary library or X for windowing	"Porting Display Mode Initialization Calls with auxInitDisplayMode()" on page 96 or Chapter 5 and glXIntro man page
smoothline()	glEnable(GL_LINE_SMOOTH)	"Lines" on page 35
spclos()	not supported	"Polygons and Quadrilaterals" on page 36
splf()	not supported see glBegin()	"Polygons and Quadrilaterals" on page 36
stencil()	glStencilFunc(), glStencilOp()	"Stencil Plane Calls" on page 64
stensize()	glStencilMask()	"Stencil Plane Calls" on page 64
stepunit()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
strwidth()	use X for fonts and strings	"Fonts and Strings" on page 111

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
subpixel()	not needed	"Porting Antialiasing Calls" on page 60
swapbuffers()	glXSwapBuffers()	glXIntro and glXSwapBuffers() man pages
swapinterval()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5
swaptmesh()	not supported, see glBegin(GL_TRIANGLE_FAN)	"Triangles" on page 41
swinopen()	use the auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
swritemask()	glStencilMask()	"Stencil Plane Calls" on page 64
t2()	glTexCoord2()	"Porting Lighting and Materials Calls" on page 70
tevbind()	glTexEnv()	"Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69 and "Porting Lighting and Materials Calls" on page 70
tevdef()	glTexEnv()	"Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69, "Porting Lighting and Materials Calls" on page 70, and "Translating tevdef()" on page 78

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
texbind()	glTexImage2D(), glTexParameter(), gluBuild2DMipmaps(),	"Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69 and "Porting Texture Calls" on page 76
texdef2d()	glTexImage2D(), glTexParameter(), gluBuild2DMipmaps()	"Porting defs, binds, and sets: Replacing 'Tables' of Stored Definitions" on page 69, "Porting Lighting and Materials Calls" on page 70, and "Translating texdef()" on page 78
texgen()	glTexGen()	"Porting Lighting and Materials Calls" on page 70 and "Translating texgen()" on page 80
textcolor()	not supported	
textinit()	not supported	
textport()	not supported	
tie()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
tpoff()	not supported	
tpon()	not supported	
translate()	glTranslate()	"Porting Matrix and Transformation Calls" on page 22
underlay()	glXChooseVisual()	

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
unqdevice()	use auxiliary library or X for event handling	"Event Handling: Replacing qdevice(), qtest(), and qread()" on page 99 or Chapter 5 and glXIntro man page
v()	glVertex()	"The v() Commands" on page 31
videocmd()	not supported	
viewport()	glViewport()	"Viewports, Screenmasks, and Scrboxes" on page 28
winattach()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
winclose()	glXDestroyContext(), XCloseDisplay()	
winconstraints()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
windepth()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
window()	glFrustum()	"Porting Matrix and Transformation Calls" on page 22
winget()	glXGetCurrentContext()	
winmove()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
winopen()	use auxiliary library or X for windowing	"Replacing winopen() with auxInitWindow()" on page 98 or Chapter 5 and glXIntro man page

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
winpop()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
winposition()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
winpush()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
winset()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro and glXMakeCurrent() man pages
wintitle()	use auxiliary library or X for windowing	"Windowing" on page 96 or Chapter 5 and glXIntro man page
wmpack()	glColorMask()	"Porting Color, Shading, and Writemask Commands" on page 44
writemask()	glIndexMask()	"Porting Color, Shading, and Writemask Commands" on page 44
writepixels()	glDrawPixels()	
writeRGB()	glDrawPixels()	
xfpt()	not supported	"Porting Picking Calls" on page 84 and "Porting Feedback Calls" on page 90
zbuffer()	glEnable(GL_DEPTH_TEST)	
zclear()	glClear(GL_DEPTH_BUFFER_BIT)	"Porting Screen and Buffer Clearing Commands" on page 20

Table A-1 (continued) IRIS GL Commands and Their OpenGL Equivalents

IRIS GL Call	OpenGL/glu/glX/aux Equivalent	Where Discussed
zdraw()	not supported	
zfunction()	glDepthFunc()	
zsource()	not supported	
zwritemask()	glDepthMask()	"Porting Color, Shading, and Writemask Commands" on page 44

a. note that this is not a direct equivalent of IRIS GL functionality—be careful when porting