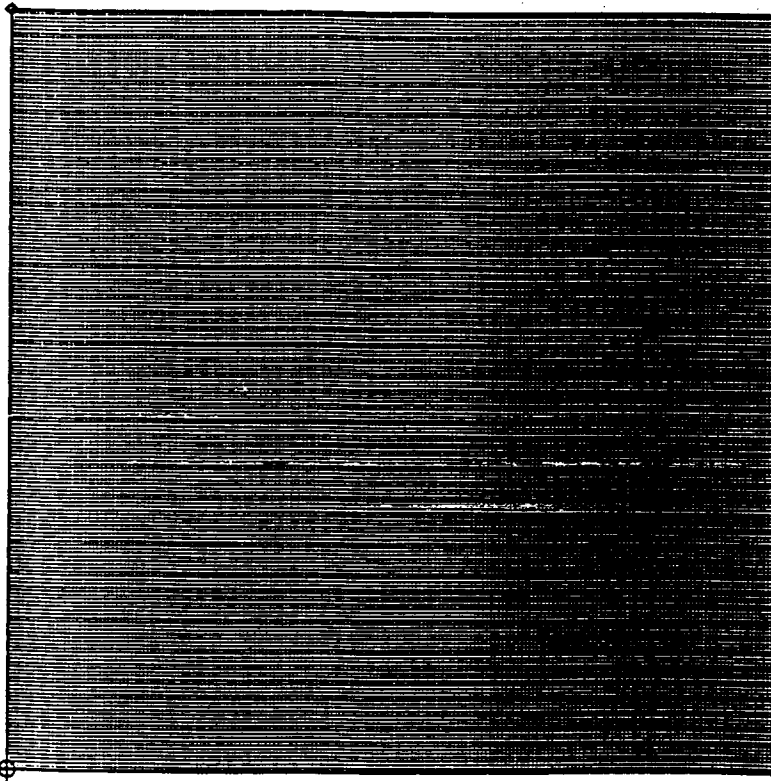


CHAPTER ONE

Problem 1.1

TESTS (1) | 0 Cells 1 Boxes 0 Paths 0 Vtx
Using Layer Table ||W U|C|D|I|N|O|R|T



sDru	lDru
Info	Show
Fill	Clr
Dash	Hcpy
Sort	cCel
cLyr	cWSz
Layr	Wdth
Save	Rstr
Fit	Xpnd
←	→
↑	↓
Zoom	Cntr
Draw	Grid
wGrd	dGrd
View	Open
Obj	Text
Add	Del
Get	Put
fGet	fPut
tGet	tPut
cGet	cPut
aPut	wGet
qMov	cMov
Mov	vStp
Cpy	pRau
pBeg	pEnd
List	Cell

Add (Box Pt. 1) | X=11 Y=10
ΔX=10 ΔY=-10 Dist=14.142136

- It's useful to use the "Print Screen" button on the keyboard to copy the screen to the clipboard.

Dist = 14.142136 μm.

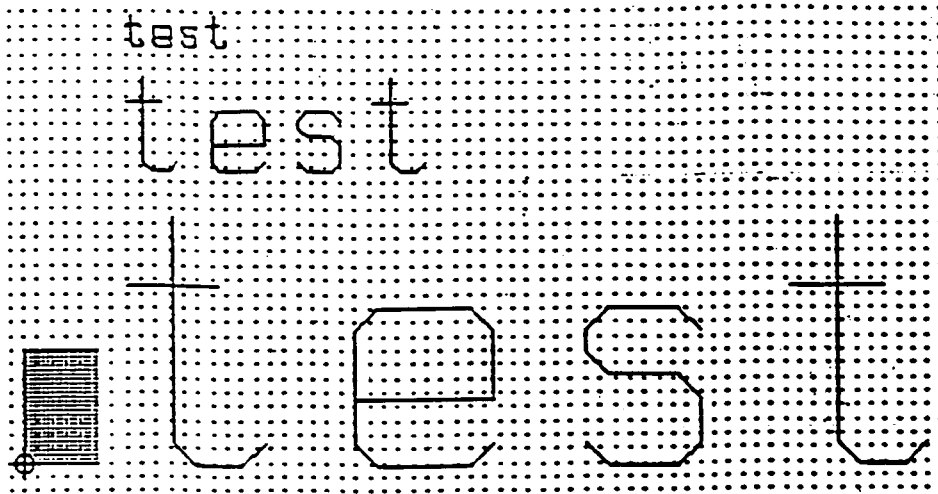
Problem 1.2

- Using qMov: LMB (Left Mouse Button) click the qMov; Cursor box covers the right top corner of the box; Draw a line (vector) starting from the right top corner (x=10, y=10) to the point with x=5, y=8, then click LMB.
- Using Get, Mov and Put:
 - Click Get with LMB; cover the right top corner with the cursor box.
 - Click Mov with LMB; draw a line (vector) starting from the right top corner (x=10, y=10) to the point with x=5, y=8, then click LMB,
 - Click Put with LMB; cover the cursor box with highlight lines and click LMB.

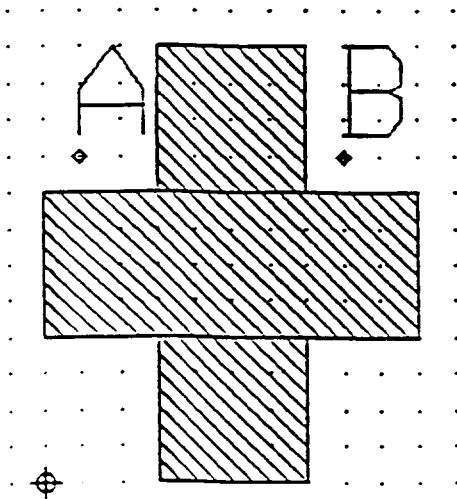
1.3 The `sWin` command saves current displayed window to numbers 1-9. The `rWin` command restores or redisplay one window according to the input number (1-9).

1.4 `cGet` command makes cells active. `CPut` command makes cells inactive.

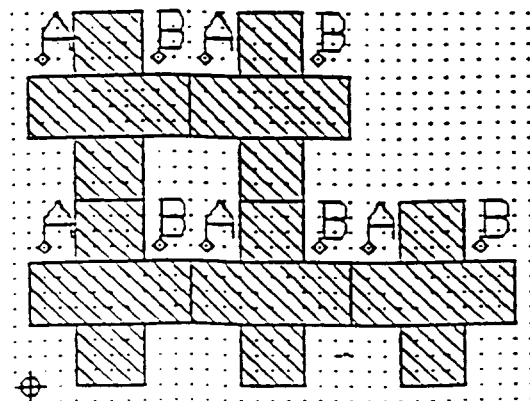
1.5 Answer:



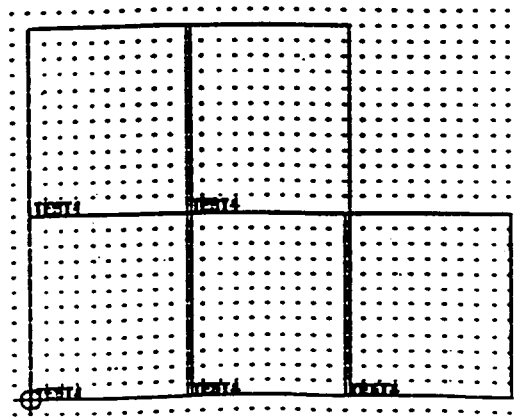
1.6 The results are as follows:



(a)



(b)



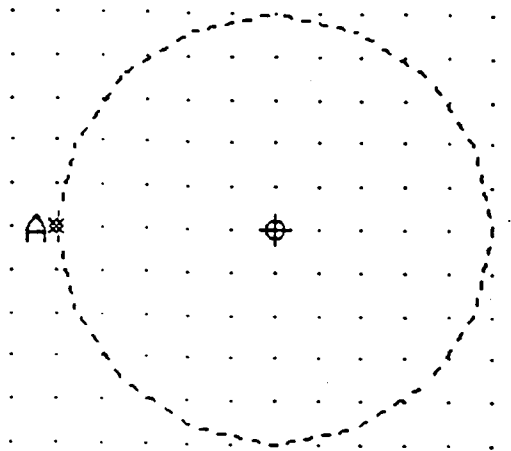
(c)

1.7. The result is the same as Fig1.6(a)

1.8 The vertices of the path or polygon must be encompassed to Get the object.

1.9 Four.

1.10 The result is the following figure:



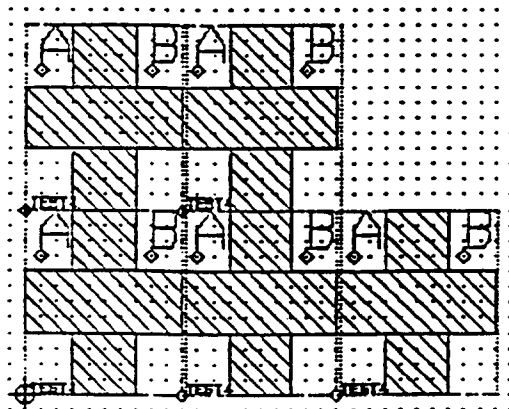
1.11 We should add the following two lines to the end of the form.dbd file:

"fkey=fit"

"fkey=aput"

1.12

- Use the Dpth command, set the cell draw depth to 0, and select command Draw. Then the cells in Fig. P1.6b will be drawn as outlines.
- The depth level means: all of the levels of cells greater than the depth level are drawn as outlines.
- Use the Dpth command and set the depth level greater than 0. Press I on keyboard. The drawing result is the following figure:



1.13

- w causes the mouse cursor to snap to the working grid.
- u causes the mouse cursor to snap to the unit grid.
- a toggles the mouse cursor between working and unit grid.
- z sets the measurement zero point.
- space gives a measurement from the zero point.

1.14

- Use tLyr command to set the text layer. Select Text command to set current object as Text (shown on the bottom of the drawing display: Obj = TEXT). Click the left mouse button in the drawing area once. Input the text character string. Press Enter key, and then the text will be shown.

- The command `tSiz` allows one to input the text size. The text size will be adjusted so that it is a integer multiple of 15 basic units.
- The text layer can be set by using the `tLyr` command: Select `tLyr` command to display the text layer table used in current process, and then use the left mouse button to select text layer.

1.15

- The difference between the path objects and the poly objects is that the width of the path objects is bigger than zero while the width of the poly objects is equal to zero. The example is shown as following figure.
- To `Get` poly or path object, one must select `Get` command, and then draw the cursor window, which must encompass the polygon or path vertices that one wants to `Get`.

