

## Lab #05

### Objective: Understanding & Implementation of Drawings through Blocks.

#### EXERCISE #01:

##### COMMANDS:

Command: pol

POLYGON Enter number of sides <4>: 5

Specify center of polygon or [Edge]: 2.5,1.5

Enter an option [Inscribed in circle/Circumscribed about circle] <I>: I

Specify radius of circle: 0.500

Command: block

Specify insertion base point:

Select objects: 1 found

Select objects:

Command: minsert

Enter block name or [?]: polygon

Units: Inches Conversion: 1.0000

Specify insertion point or [Basepoint/Scale/X/Y/Z/Rotate]:

Enter X scale factor, specify opposite corner, or [Corner/XYZ] <1>:

Enter Y scale factor <use X scale factor>:

Specify rotation angle <0>: 45

Enter number of rows (---) <1>: 4

Enter number of columns (|||) <1>: 4

Enter distance between rows or specify unit cell (---): 1.00

Specify distance between columns (|||): 1.00

Command: mtext

Current text style: "Standard" Text height: 0.2000

Specify first corner:

Specify opposite corner or [Height/Justify/Line spacing/Rotation/Style/Width]:

Command: mtext

Current text style: "Standard" Text height: 0.2000

Specify first corner:

Specify opposite corner or [Height/Justify/Line spacing/Rotation/Style/Width]:

Command: \_dimaligned

Specify first extension line origin or <select object>:

Specify second extension line origin:

Non-associative dimension created.

Specify dimension line location or

[Mtext/Text/Angle]:

Dimension text = 1.0000

Command: line

Command: \_line Specify first point:

Specify next point or [Undo]:

Command: \_dimangular

Select arc, circle, line, or <specify vertex>:

Select second line:

Specify dimension arc line location or [Mtext/Text/Angle]:

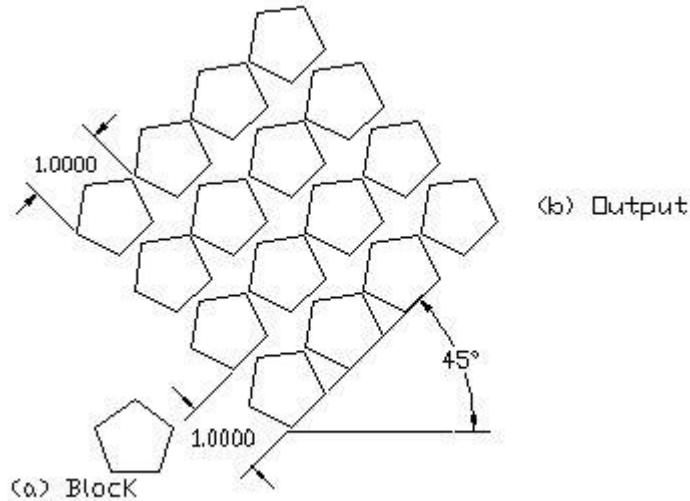
Dimension text = 45

Command: jpgout

Select objects or <all objects and viewports>: Specify opposite corner: 8 found

Select objects or <all objects and viewports>:

**Output Drawing:**



## Exercise #02:

### COMMANDS:

Command: circle

Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 3,2.5

Specify radius of circle or [Diameter]: 0.5000

Command: trim

Current settings: Projection=UCS, Edge=None

Select cutting edges ...

Select objects or <select all>: Specify opposite corner: 3 found

Select objects:

Select object to trim or shift-select to extend or

[Fence/Crossing/Project/Edge/eRase/Undo]:

Select object to trim or shift-select to extend or

[Fence/Crossing/Project/Edge/eRase/Undo]:

Select object to trim or shift-select to extend or

[Fence/Crossing/Project/Edge/eRase/Undo]:

Command: Specify opposite corner:

Command: block

Specify insertion base point: Specify insertion base point:

Select objects: Specify opposite corner: 3 found

Command: insert

Specify insertion point or [Basepoint/Scale/X/Y/Z/Rotate]:

Command: insert

Specify insertion point or [Basepoint/Scale/X/Y/Z/Rotate]:

Command: copy

Select objects: 1 found

Select objects:

Specify base point or [Displacement] <Displacement>: Specify second point or <use first point as displacement>:

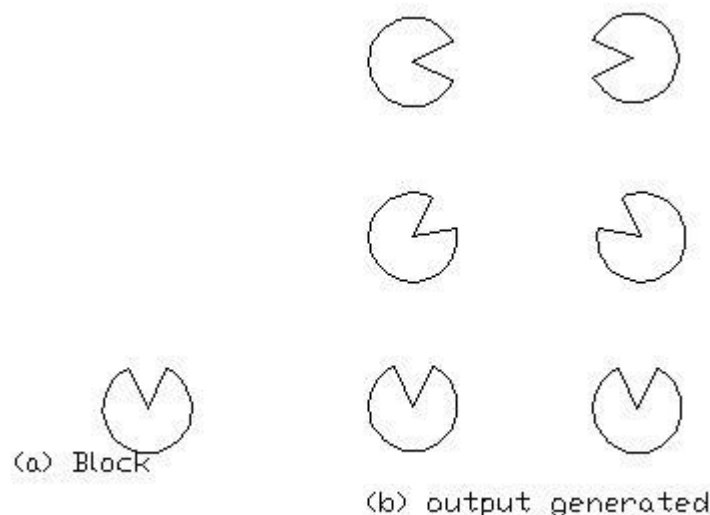
Specify second point or [Exit/Undo] <Exit>: \*Cancel\*

Command: rotate

Current positive angle in UCS: ANGDIR=counterclockwise ANGBASE=0

Select objects: 1 found  
 Select objects:  
 Specify base point:  
 Specify rotation angle or [Copy/Reference] <0>:  
 Command: mirror  
 Select objects: 1 found.  
 Specify first point of mirror line:  
 Specify second point of mirror line:  
 Erase source objects? [Yes/No] <N>: N  
 Command: copy  
 Select objects: 1 found  
 Select objects:  
 Specify base point or [Displacement] <Displacement>: Specify second point or  
 <use first point as displacement>:  
 Specify second point or [Exit/Undo] <Exit>:  
 Specify second point or [Exit/Undo] <Exit>: \*Cancel\*  
 Command: rotate  
 Current positive angle in UCS: ANGDIR=counterclockwise ANGBASE=0  
 Select objects: 1 found  
 Select objects:  
 Specify base point:  
 Specify rotation angle or [Copy/Reference] <308>:  
 Command: rotate  
 Current positive angle in UCS: ANGDIR=counterclockwise ANGBASE=0  
 Select objects: 1 found  
 Select objects:  
 Specify base point:  
 Specify rotation angle or [Copy/Reference] <270>:  
 Command: mtext  
 Current text style: "Standard" Text height: 0.2000  
 Specify first corner:  
 Specify opposite corner or [Height/Justify/Line spacing/Rotation/Style/Width]:  
 Command: mtext  
 Current text style: "Standard" Text height: 0.2000  
 Specify first corner:  
 Specify opposite corner or [Height/Justify/Line spacing/Rotation/Style/Width]:  
 Command: jpgout  
 Select objects or <all objects and viewports>: Specify opposite corner: 9 found  
 Select objects or <all objects and viewports>:

### Output Drawing:



**Exercise #03:****Commands:**

Command: line

Specify first point: 3.5,1

Specify next point or [Undo]: @5,0

Command: line

Specify first point: 8.5,1

Specify next point or [Undo]: @0,7.5

Command: line

Specify first point: 8.5,1

Specify next point or [Undo]: @0,7.5

Command: line

Specify first point: 3.5,1

Specify next point or [Undo]: @0,7.5

Specify next point or [Undo]:

Command: circle

Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 6,1

Specify radius of circle or [Diameter]: 0.5

Command: trim

Current settings: Projection=UCS, Edge=None

Select cutting edges ...

Select objects or <select all>: 1 found

Select objects:

Select object to trim or shift-select to extend or

[Fence/Crossing/Project/Edge/eRase/Undo]:

Command: line

Specify first point: 5.6145,1.0143

Specify next point or [Undo]: @0.3555,0

Command: line

Specify first point: 6.2519,1.1613

Specify next point or [Undo]: @0,-0.3429

Command: line

Specify first point: 5,2.5

Specify next point or [Undo]: @2,0

Command: line

Specify first point: 7,2.5

Specify next point or [Undo]: @1.5,0

Command: line

Specify first point: 5,2.5

Specify next point or [Undo]: @-1.5,0

Command: line

Specify first point: 3.5,4

Specify next point or [Undo]: @5,0

Command: line

Specify first point: 5.7200,4.5104

Specify next point or [Undo]: @0,-1

Command: line

Specify first point: 6.2356,4.2804

Specify next point or [Undo]: @0,-0.5

Command: trim  
Current settings: Projection=UCS, Edge=None  
Select cutting edges ...  
Select objects or <select all>: 1 found  
Select objects: 1 found, 2 total  
Select objects:  
Select object to trim or shift-select to extend or  
[Fence/Crossing/Project/Edge/eRase/Undo]:  
Command: line  
Specify first point: 5,8.5  
Specify next point or [Undo]: @2,0  
Command: copy  
Select objects: 1 found  
Select objects: 1 found, 2 total  
Select objects: 1 found, 3 total  
Select objects: 1 found, 4 total  
Select objects:  
Specify base point or [Displacement] <Displacement>: Specify second point or  
<use first point as displacement>:  
Command: line  
Specify first point: 3.5,5.5  
Specify next point or [Undo]: @1.6,0  
Command: line  
Specify first point: 6.9,5.5  
Specify next point or [Undo]: @1.6,0  
Command: circle  
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 5.4,5.5  
Specify radius of circle or [Diameter] <0.5000>: 0.300  
Command: circle  
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 5.7,5.5  
Specify radius of circle or [Diameter] <0.3000>: 0.300  
Command: circle  
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 6,5.5  
Specify radius of circle or [Diameter] <0.3000>: 0.300  
Command: circle  
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 6.3,5.5  
Specify radius of circle or [Diameter] <0.3000>: 0.300  
Command: circle  
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 6.6,5.5  
Specify radius of circle or [Diameter] <0.3000>: 0.300  
Command: trim  
Current settings: Projection=UCS, Edge=None  
Select cutting edges ...  
Select objects or <select all>: Specify opposite corner: 5 found  
Select objects:  
Select object to trim or shift-select to extend or  
[Fence/Crossing/Project/Edge/eRase/Undo]:

Select object to trim or shift-select to extend or  
[Fence/Crossing/Project/Edge/eRase/Undo]: \_u  
Command has been completely undone.  
Select object to trim or shift-select to extend or  
[Fence/Crossing/Project/Edge/eRase/Undo]: Specify opposite corner:  
Select object to trim or shift-select to extend or  
[Fence/Crossing/Project/Edge/eRase/Undo]:  
Command: copy  
Select objects: 1 found  
Select objects: 1 found, 2 total  
Select objects: 1 found (1 duplicate), 2 total  
Select objects: Specify opposite corner: 7 found (1 duplicate), 8 total  
Select objects: Specify opposite corner: 0 found  
Select objects: 1 found, 9 total  
Select objects:  
Specify base point or [Displacement] <Displacement>: Specify second point or  
<use first point as displacement>:  
Command: line  
Specify first point:  
Specify next point or [Undo]:  
Command: line  
Specify first point:  
Specify next point or [Undo]:  
Command: line  
Specify first point:  
Specify next point or [Undo]:  
Command: line  
Specify first point:  
Specify next point or [Undo]:  
Specify next point or [Undo]:  
Command: line  
Specify first point:  
Specify next point or [Undo]:  
Command: line  
Specify first point:  
Specify next point or [Undo]:  
Command: dimradius  
Select arc or circle:  
Dimension text = 0.3000  
Specify dimension line location or [Mtext/Text/Angle]:  
Command:  
Command:  
Command: dimaligned  
Specify first extension line origin or <select object>:  
Specify second extension line origin:  
Specify dimension line location or  
[Mtext/Text/Angle]:  
Dimension text = 7.5000

Command: dimaligned

Specify first extension line origin or <select object>:

Specify second extension line origin:

Specify dimension line location or

[Mtext/Text/Angle]:

Dimension text = 5.0000

Command: dimradius

Select arc or circle:

Dimension text = 0.3000

Specify dimension line location or [Mtext/Text/Angle]:

**Output Drawing:**

