
Lab #07(Open Ended)

Exercise #01: Create the given drawing:**Commands:**

Command: line

Specify first point: 2,0.5

Specify next point or [Undo]: @0,14.75

Command: line

Specify first point: 2,15.25

Specify next point or [Undo]: @4,0

Specify next point or [Undo]: @0,-14.75

Command: line

Specify first point: 2,0.5

Specify next point or [Undo]: @0.75,0

Specify next point or [Undo]: @0,2.75

Command: line

Specify first point: 2.5,0.5

Specify next point or [Undo]: @0,2.75

Command: line

Specify first point: 6,0.5

Specify next point or [Undo]: @-0.75,0

Command: line

Specify first point: 5.25,0.25

Specify next point or [Undo]: @14.4,0

Command: arc

Specify start point of arc or [Center]:

Specify second point of arc or [Center/End]: E

Specify end point of arc:

Specify center point of arc or [Angle/Direction/Radius]: radius

Specify radius of arc: 2.75

Command: _u POLYGON

Command: polygon

Enter number of sides <7>: 7

Specify center of polygon or [Edge]: 2.8,4.0432

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

Specify radius of circle: 0.5

Command: copy

Select objects: 1 found

Select objects:

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

Command: line

Specify first point: 2.2842,8.5

Specify next point or [Undo]: @0,4.5

Specify next point or [Undo]: @0.2842,0

Specify next point or [Close/Undo]: @0,-4.5

Specify next point or [Close/Undo]: @-0.2842,0

Command: line

Specify first point: 2.5684,13

Specify next point or [Undo]: @0.70,0

Command: line

Specify first point: 2.5684,8.5

Specify next point or [Undo]: @0.70,0

Command: line
Specify first point: 3.7445,12.4767
Specify next point or [Undo]: @0,-3.5
Command: fillet
Select first object or [Undo/Polyline/Radius/Trim/Multiple]: Radius
Specify fillet radius <0.0000>: 0.5
Select first object or [Undo/Polyline/Radius/Trim/Multiple]:
Select second object or shift-select to apply corner:
Command: fillet
Select first object or [Undo/Polyline/Radius/Trim/Multiple]: Radius
Specify fillet radius <0.5000>: 0.5
Select first object or [Undo/Polyline/Radius/Trim/Multiple]:
Select second object or shift-select to apply corner:
Command: line
Specify first point: 3.7445,12.5
Specify next point or [Undo]: 4.2445,9.0
Specify next point or [Undo]: 5.2003,11.7770
Specify next point or [Close/Undo]: @0,-2.5
Command: line
Specify first point:3.7445,9.0
Specify next point or [Undo]:4.2986,12.5173
Specify next point or [Undo]:5.2003,9.2770
Command: line
Specify first point:4.2986,12.5173
Specify next point or [Undo]:4.2445,9.000
Command:line
Command: _line Specify first point:3.7445,12.5000
Specify next point or [Undo]:4.2986,12.5173
Specify next point or [Undo]:4.7876,11.9799
Command:line
Command:_line Specify first point:3.7445,9.000
Specify next point or [Undo]:4.2445,9.000
Specify next point or [Undo]:4.7876,9.4799
Command: line
Specify first point: 2,15.4693
Specify next point or [Undo]: @4.0,0
Command: line
Specify first point: 6.25,15.4693
Specify next point or [Undo]: @9.0,0
Command: line
Specify first point: 6.25,15.2693
Specify next point or [Undo]: @9.0,0
Specify next point or [Undo]: @0.2,0
Command: line
Specify first point: 6.25,0.5193
Specify next point or [Undo]: @9.2,0
Specify next point or [Undo]: @0,2.5
Specify next point or [Close/Undo]: @-9.2,0
Specify next point or [Close/Undo]: @0,-2.5
Command: line
Specify first point: 15.4500,15.2693
Specify next point or [Undo]: @0,-12.0500
Command: line
Specify first point: 15.2500,15.2693
Specify next point or [Undo]: @0,-12.0500
Command: line

Specify first point: 15.4500,3.2193
Specify next point or [Undo]: @-2,0
Command: line
Specify first point: 12.4500,3.2193
Specify next point or [Undo]: @-6.2,0
Specify next point or [Undo]: @0,3.2
Command: line
Specify first point: 6.25,8.9193
Specify next point or [Undo]: @0,6.3500
Command: line
Specify first point: 11.4500,3.2193
Specify next point or [Undo]: @0,1.75
Command: arc
Specify start point of arc or [Center]:13.4500,3.0193
Specify second point of arc or [Center/End]:e
Specify end point of arc:11.4500,4.9693
Specify center point of arc or [Angle/Direction/Radius]:r
Specify radius of arc: 2.00
Command: line
Specify first point: 6.2500,8.9193
Specify next point or [Undo]: @2.2500,0
Specify next point or [Undo]: @0,-0.2
Specify next point or [Close/Undo]: @-2.25,0
Specify next point or [Close/Undo]: @0,0.2
Command: line
Specify first point: 6.2500,8.9193
Specify next point or [Undo]: @0.2,0
Specify next point or [Undo]: @0,6.3500
Specify next point or [Close/Undo]: @0,-0.25
Specify next point or [Close/Undo]: @8.800,0
Command: line
Specify first point: 6.2500,6.4193
Specify next point or [Undo]: @0.2,0
Specify next point or [Undo]: @0,-3.2
Command:arc
Specify start point of arc or [Center]: 6.25,6.4193
Specify second point of arc or [Center/End]:e
Specify end point of arc: 8.5,8.9193
Specify center point of arc or [Angle/Direction/Radius]:r
Specify radius of arc: 2.25
Command: erase
Select objects: 1 found
Command: line
Specify first point: 5.25,0.25
Specify next point or [Undo]: @10.2,0
Specify next point or [Undo]: @0,0.2693
Command: line
Specify first point: 14,5.5
Specify next point or [Undo]: 10.5,6.2
Command: line
Specify first point: 14,8
Specify next point or [Undo]: 10.5,7.5
Command:arc
Command: _arc Specify start point of arc or [Center]:
Specify second point of arc or [Center/End]: _c Specify center point of arc:
Specify end point of arc or [Angle/chord Length]:

Command:arc
Command: _arc Specify start point of arc or [Center]:
Specify second point of arc or [Center/End]: _c Specify center point of arc:
Specify end point of arc or [Angle/chord Length]:
Command: copy
Select objects: Specify opposite corner: 4 found
Select objects:
Specify base point or [Displacement] <Displacement>: 10.5,11.5
Specify second point or <use first point as displacement>:
Command: rotate
Current positive angle in UCS: ANGDIR=counterclockwise ANGBASE=0
Select objects: Specify opposite corner: 4 found
Specify base point:
Specify rotation angle or [Copy/Reference] <0>: 90
Command: copy
Select objects: Specify opposite corner: 4 found
Specify base point or [Displacement] <Displacement>: Specify second point or <use first point as displacement>:
Command: erase
Select objects: 4 found, 4 Total
Command: circle
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]:13.2410,13.2724
Specify radius of circle or [Diameter]: 1.5
Command: copy
Select objects: Specify opposite corner: 0 found
Select objects: 3 found,3 total
Specify base point or [Displacement] <Displacement>:13.23,10.4
Command: _scale
Select objects: 3 found,3 total
Select objects:
Specify base point:13.23,10.4
Specify scale factor or [Copy/Reference] <1.0000>:
Command: circle
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]:13.2,12.8
Specify radius of circle or [Diameter] <0.3000>: 0.3999
Command: copy
Select objects: 1 found
Specify base point or [Displacement] <Displacement>:13.2,12.05
Command: erase
Select objects: 1 found
Command: array
Specify center point of array:13.2410,13.2724
Select objects: 1 found
Command: circle
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 13.2410,13.2724
Specify radius of circle or [Diameter] <0.3999>: 1.05
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: 1 found, 3 total
Select objects: 1 found, 4 total
Select objects: 1 found, 5 total
Select objects: 1 found, 6 total
Select objects: 1 found, 7 total

Select objects: 1 found, 8 total
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]:
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]:
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]:
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]:
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: circle
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]:8.0181,4.7655
Specify radius of circle or [Diameter] <1.0500>: 1.2527
Command: line
Specify first point: 7.3,0.5
Specify next point or [Undo]: @0,0.25
Specify next point or [Undo]: @2.45,0
Specify next point or [Close/Undo]: @0,-0.25
Command: line
Specify first point: 7.78,1.21
Specify next point or [Undo]: @1.5748,0
Command: line
Specify first point: 15.45,2.5
Specify next point or [Undo]: @-1.50,0
Specify next point or [Undo]: @0,-1.5
Specify next point or [Close/Undo]: @1.5,0
Command: ellipse
Specify axis endpoint of ellipse or [Arc/Center]: -8.5,4.5
Specify other endpoint of axis: @0,0.6734
Specify distance to other axis or [Rotation]:
Command: rotate
Current positive angle in UCS: ANGDIR=counterclockwise ANGBASE=0
Select objects: 1 found
Select objects:
Specify base point:-10.77,4.11
Specify rotation angle or [Copy/Reference] <90>: 90
Command: copy
Select objects: 1 found
Specify base point or [Displacement] <Displacement>: -5,3.6
Command: erase
Select objects: 1 found
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]:
Command: ellipse
Specify axis endpoint of ellipse or [Arc/Center]: 7.78,1.21
Specify other endpoint of axis: @1.5748,0
Specify distance to other axis or [Rotation]:
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
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 = 2.4500
Command: _dimaligned
Specify first extension line origin or <select object>:
Specify second extension line origin:
Specify dimension line location or
[Mtext/Text/Angle]:
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 = 1.5000
Command: circle
Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 20.5,2.5
Specify radius of circle or [Diameter] <1.2527>: 0.25
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 = 1.5000
Command: copy
Select objects: 1 found
Select objects:
Specify base point or [Displacement] <Displacement>: 16,4
Command: erase
Select objects: 1 found
Command: array
Specify center point of array:
Select objects: 1 found
Command: trim
Current settings: Projection=UCS, Edge=None

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: trim
Current settings: Projection=UCS, Edge=None
Select cutting edges ...
Select objects or <select all>: Specify opposite corner: 0 found
Select objects or <select all>: Specify opposite corner: 13 found
6 were not a valid edge or selection method.
Select objects: 1 found, 8 total
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]:
Command: line
Specify first point:12.9474,10
Specify next point or [Undo]:13.3353,10
Command: line
Specify first point:13.3353,10
Specify next point or [Undo]:13.7405,9.5638
Command: line
Specify first point:13.7405,9.5638
Specify next point or [Undo]:13.7405,9.3088
Command: line
Specify first point:13.7405,9.3088
Specify next point or [Undo]:13.3353,8.8110
Command: line
Specify first point:13.3353,8.8110
Specify next point or [Undo]:12.9474,8.8110
Command: line
Specify first point:12.9474,8.8110
Specify next point or [Undo]:12.5980,9.3088
Command: line
Specify first point:12.5980,9.3088
Specify next point or [Undo]:12.5980,9.59808
Command: line
Specify first point:12.5980,9.59808
Specify next point or [Undo]:12.9474,10
Command: hatch
Select objects or [picK internal point/remove Boundaries]:1 found
Select objects or [picK internal point/remove Boundaries]:1 found, 2 total
Select objects or [picK internal point/remove Boundaries]:1 found, 3 total
Select objects or [picK internal point/remove Boundaries]:1 found, 4 total
Select objects or [picK internal point/remove Boundaries]:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Command:extrim
Specify the side to trim on:
Command: Specify opposite corner:
Command:extrim
Specify the side to trim on:

Command: Specify opposite corner:
Command: hatch
Select objects or [picK internal point/remove Boundaries]:1 found
Select objects or [picK internal point/remove Boundaries]:1 found, 2 total
Select objects or [picK internal point/remove Boundaries]:Specify opposite corner: 1 found, 3 total
Select objects or [picK internal point/remove Boundaries]:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Pick or press Esc to return to dialog or <Right-click to accept hatch>:
Command: explode
Select objects: 1 found
Select objects:
Hatch boundary associativity removed.
Command: _dimradius
Select arc or circle:
Dimension text = 2.7500
Specify dimension line location or [Mtext/Text/Angle]:
Command:
Command:
Command: _dimradius
Select arc or circle:
Object selected is not a circle or arc.
Select arc or circle:
Dimension text = 1.3126
Specify dimension line location or [Mtext/Text/Angle]:
Command:
Command:
Command: _dimradius
Select arc or circle:
Dimension text = 0.6331
Specify dimension line location or [Mtext/Text/Angle]:
Command:
Command:
Command: _dimradius
Select arc or circle:
Dimension text = 0.6331
Specify dimension line location or [Mtext/Text/Angle]:
Command:
Command:
Command: _dimradius
Select arc or circle:
Dimension text = 2.2500
Specify dimension line location or [Mtext/Text/Angle]:
Command:
Command:
Command: _dimradius
Select arc or circle:
Dimension text = 1.3126
Specify dimension line location or [Mtext/Text/Angle]:
Command:
Command: _dimradius

Select arc or circle:
Dimension text = 0.3999
Specify dimension line location or [Mtext/Text/Angle]:
Command:
Command:
Command: _dimradius
Select arc or circle:
Dimension text = 1.5000
Specify dimension line location or [Mtext/Text/Angle]:
Command:
Command:
Command: _dimradius
Select arc or circle:
Dimension text = 0.2500
Specify dimension line location or [Mtext/Text/Angle]:
Command:
Command:
Command: _dimradius
Select arc or circle:
Dimension text = 2.0000
Specify dimension line location or [Mtext/Text/Angle]:
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 = 0.5000:
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 = 0.7500
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 = 14.7500
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 = 13.2500
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 = 4.0000
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 = 9.0000
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 = 4.5000
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 = 2.5000
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 = 1.7500
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 = 2.2500
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 = 0.2500
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 = 0.2000

Output:

