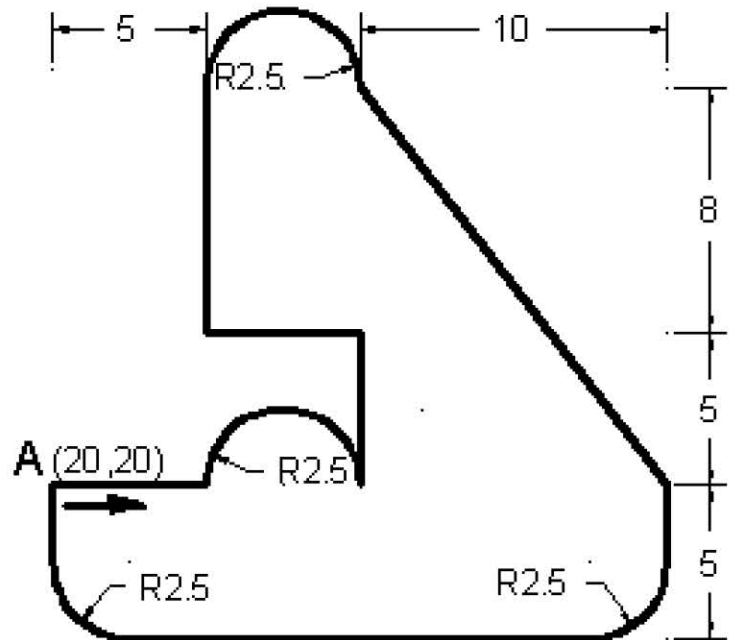


Q1: Write the command-statements for drawing the figure shown below by three methods using polyline commands starting from point (A) and in the direction of the arrow shown in the figure.



(JJ)

Solution:

1) Absolute Coordinate:

Command: pl PLINE
 Specify start point: 20,20
 Current line-width is 0.0000
 Specify next point or [Arc/Halfwidth/Length/Undo/Width]: 25,20
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
 Specify radius of arc: 2.5
 Specify endpoint of arc or [Angle]: a
 Specify included angle: -180
 Specify direction of chord for arc <0>: 0
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 30,25
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 25,25
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 25,33
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
 Specify radius of arc: 2.5
 Specify endpoint of arc or [Angle]: a
 Specify included angle: -180
 Specify direction of chord for arc <90>: 0
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 40,20
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 40,17.5
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -90
Specify direction of chord for arc <270>: 225
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 22.5,15
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -90
Specify direction of chord for arc <180>: 135
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 20,20
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]:
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*
Press ESC or space bar.

2) Relative Coordinate:

Command: pl PLINE
Specify start point: 20,20
Current line-width is 0.0000
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @5,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -180
Specify direction of chord for arc <0>: 0
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,5
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @-5,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,8
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a

Specify included angle: -180
Specify direction of chord for arc <90>: 0
Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @10,-13
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,-2.5
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -90
Specify direction of chord for arc <270>: 225
Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @-15,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -90
Specify direction of chord for arc <180>: 135
Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,2.5
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*
Press ESC or space bar.

3) Polar Distance:

Command: pl PLINE
Specify start point: 20,20
Current line-width is 0.0000
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @5<0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -180
Specify direction of chord for arc <0>: 0
Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @5<90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @5<180
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @8<90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: a

Specify included angle: -180

Specify direction of chord for arc <90>: 0

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @16.4<-52.4

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @2.5<-90

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: a

Specify included angle: -90

Specify direction of chord for arc <270>: 225

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @15<180

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: a

Specify included angle: -90

Specify direction of chord for arc <180>: 135

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l

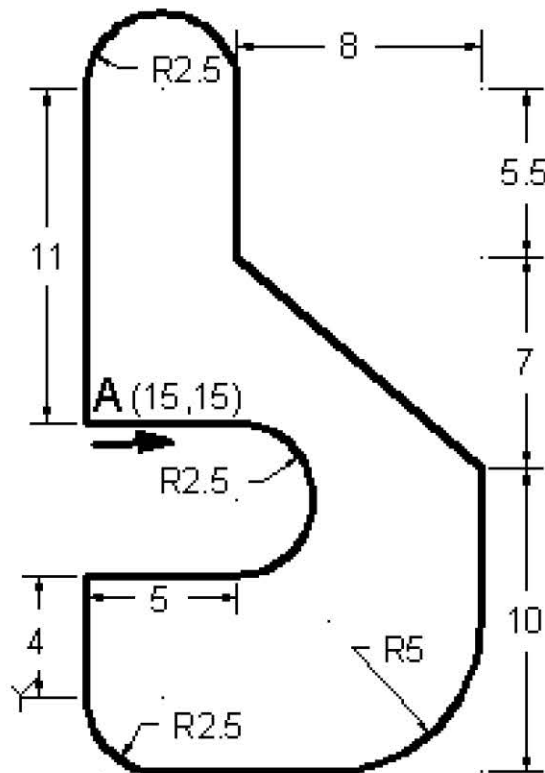
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @2.5<90

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*

Press ESC or space bar.

Q2: Write the command-statements for drawing the figure shown below by three methods using polyline commands starting from point (A) and in the direction of the arrow shown in the figure.

(KK)



Solution:

1) Absolute Coordinate:

Command: pl PLINE
 Specify start point: 15,15
 Current line-width is 0.0000
 Specify next point or [Arc/Halfwidth/Length/Undo/Width]: 20,15
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
 Specify radius of arc: 2.5
 Specify endpoint of arc or [Angle]: a
 Specify included angle: -180
 Specify direction of chord for arc <0>: 270
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 15,10
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 15,6
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
 Specify radius of arc: 2.5
 Specify endpoint of arc or [Angle]: 17.5,3.5

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 23,3.5

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 5

Specify endpoint of arc or [Angle]: 28,8.5

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 28,13.5

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 20,20.5

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 20,26

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: 15,26

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 15,15

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*

Press ESC or space bar.

2) Relative Coordinate:

Command: pl PLINE

Specify start point: 15,15

Current line-width is 0.0000

Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @5,0

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: a

Specify included angle: -180

Specify direction of chord for arc <0>: 270

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @-5,0

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,-4

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: @2.5,-2.5

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: @5,5,0

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 5

Specify endpoint of arc or [Angle]: @5,5

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: @0,5

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: @-8,7

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: @0,5.5

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: @-5,0

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: @0,-11

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: *Cancel*

Press ESC or space bar.

3) Polar Distance:

Command: pl PLINE

Specify start point: 15,15

Current line-width is 0.0000

Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @5<0

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: a

Specify included angle: -180

Specify direction of chord for arc <0>: 270

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: @5<180

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: @4<270

Specify next point or [Arc/CLOSE/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

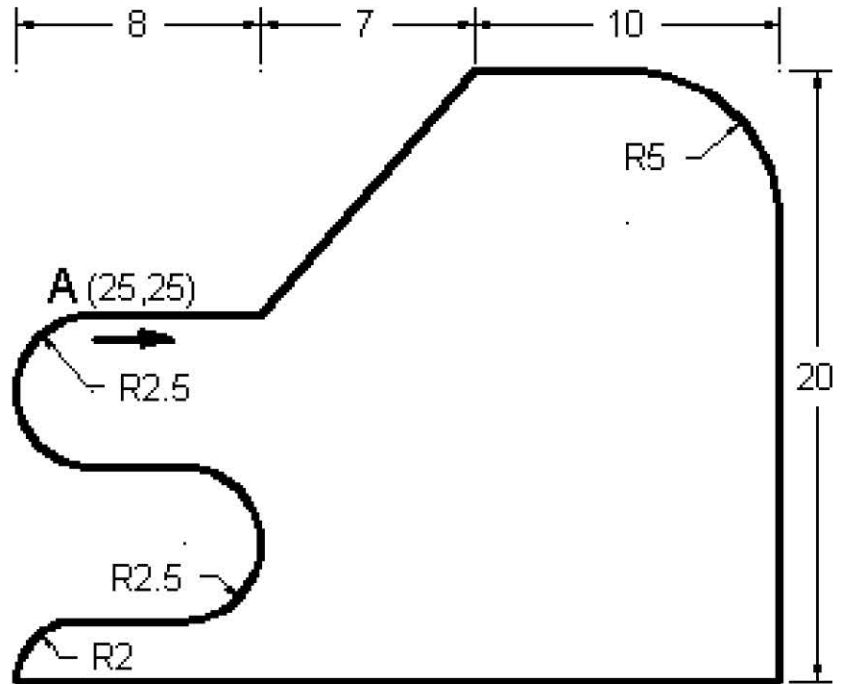
Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: @3.5<-45

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @5.5<0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENter/CLOSE/Direction/Halfwidth/Line/Radius/Second
pt/Undo/Width]: r
Specify radius of arc: 5
Specify endpoint of arc or [Angle]: @7.1<45
Specify endpoint of arc or [Angle/CENter/CLOSE/Direction/Halfwidth/Line/Radius/Second
pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @5<90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @10.6<138.8
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @5.5<90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENter/CLOSE/Direction/Halfwidth/Line/Radius/Second
pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: @5<180
Specify endpoint of arc or [Angle/CENter/CLOSE/Direction/Halfwidth/Line/Radius/Second
pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @11<-90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*
Press ESC or space bar.

Q3: Write the command-statements for drawing the figure shown below by three methods using polyline commands starting from point (A) and in the direction of the arrow shown in the figure.



(LL)

Solution:

1) Absolute Coordinate:

Command: pl PLINE
 Specify start point: 25,25
 Current line-width is 0.0000
 Specify next point or [Arc/Halfwidth/Length/Undo/Width]: 30.5,25
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 37.5,33
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 42.5,33
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
 Specify radius of arc: 5
 Specify endpoint of arc or [Angle]: a
 Specify included angle: -90
 Specify direction of chord for arc <0>: -45
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 47.5,13
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 22.5,13
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
 Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
 Specify radius of arc: 2
 Specify endpoint of arc or [Angle]: a
 Specify included angle: -90
 Specify direction of chord for arc <180>: 45

Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 28,15
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: 28,20
Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 25,20
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -180
Specify direction of chord for arc <180>: 90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*
Press ESC or space bar.

2) Relative Coordinate:

Command: pl PLINE
Specify start point: 25,25
Current line-width is 0.0000
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @5.5,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @7,8
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @5,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 5
Specify endpoint of arc or [Angle]: a
Specify included angle: -90
Specify direction of chord for arc <0>: 315
Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: I
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,-15
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @-25,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENTER/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2
Specify endpoint of arc or [Angle]: a
Specify included angle: -90

Specify direction of chord for arc <180>: 45
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @3.5,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: @0,5
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @-3,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -180
Specify direction of chord for arc <180>: 90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*
Press ESC or space bar.

3) Polar Distance:

Command: pl PLINE
Specify start point: 25,25
Current line-width is 0.0000
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @5.5<0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @10.6<48.8
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @5<0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 5
Specify endpoint of arc or [Angle]: a
Specify included angle: -90
Specify direction of chord for arc <0>: -45
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @15<270
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @25<180
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2
Specify endpoint of arc or [Angle]: a
Specify included angle: -90
Specify direction of chord for arc <180>: 45

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @3.5<0

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: @5<90

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @3<180

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: a

Specify included angle: -180

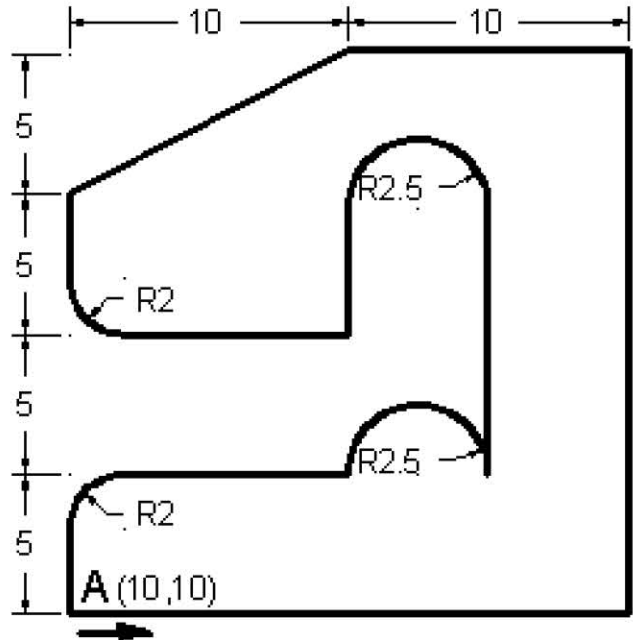
Specify direction of chord for arc <180>: 90

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*

Press ESC or space bar.

Q4: Write the command-statements for drawing the figure shown below by three methods using polyline commands starting from point (A) and in the direction of the arrow shown in the figure.

(II)



Solution:

1) Absolute Coordinate:

Command: pl PLINE
 Specify start point: 10,10
 Current line-width is 0.0000
 Specify next point or [Arc/Halfwidth/Length/Undo/Width]: 30,10
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 30,30
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 20,30
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 10,25
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 10,22
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
 Specify endpoint of arc or [Angle/CEnter/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
 Specify radius of arc: 2
 Specify endpoint of arc or [Angle]: 12,20
 Specify endpoint of arc or [Angle/CEnter/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 20,20
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 20,25
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
 Specify endpoint of arc or [Angle/CEnter/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
 Specify radius of arc: 2.5
 Specify endpoint of arc or [Angle]: a
 Specify included angle: -180
 Specify direction of chord for arc <90>: 0
 Specify endpoint of arc or [Angle/CEnter/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
 Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 25,15

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENTER/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: 20,15
Specify endpoint of arc or [Angle/CENTER/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 12,15
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENTER/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2
Specify endpoint of arc or [Angle]: 10,13
Specify endpoint of arc or [Angle/CENTER/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: 10,10
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*
Press ESC or space bar.

2) Relative Coordinate:

Command: pl PLINE
Specify start point: 10,10
Current line-width is 0.0000
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @20,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,20
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @-10,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @-10,-5
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,-3
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENTER/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2
Specify endpoint of arc or [Angle]: @2,-2
Specify endpoint of arc or [Angle/CENTER/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @8,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,5
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CENTER/Close/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -180
Specify direction of chord for arc <90>: 0

Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,-10
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: @-5,0
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @-8,0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2
Specify endpoint of arc or [Angle]: @-2,-2
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @0,-3
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*
Press ESC or space bar.

3) Polar Distance:

Command: pl PLINE
Specify start point: 10,10
Current line-width is 0.0000
Specify next point or [Arc/Halfwidth/Length/Undo/Width]: @20<0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @20<90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @10<180
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @11.2<206.6
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @3<270
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2
Specify endpoint of arc or [Angle]: @2.8<-45
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @8<0
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @5<90
Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a
Specify endpoint of arc or [Angle/CEnter/CLose/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r
Specify radius of arc: 2.5
Specify endpoint of arc or [Angle]: a
Specify included angle: -180
Specify direction of chord for arc <90>: 0

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @10<270

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2.5

Specify endpoint of arc or [Angle]: @5<180

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @8<180

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: a

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: r

Specify radius of arc: 2

Specify endpoint of arc or [Angle]: @2.8<225

Specify endpoint of arc or [Angle/CEnter/CLOSE/Direction/Halfwidth/Line/Radius/Second pt/Undo/Width]: l

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: @3<-90

Specify next point or [Arc/Close/Halfwidth/Length/Undo/Width]: *Cancel*

Press ESC or space bar.