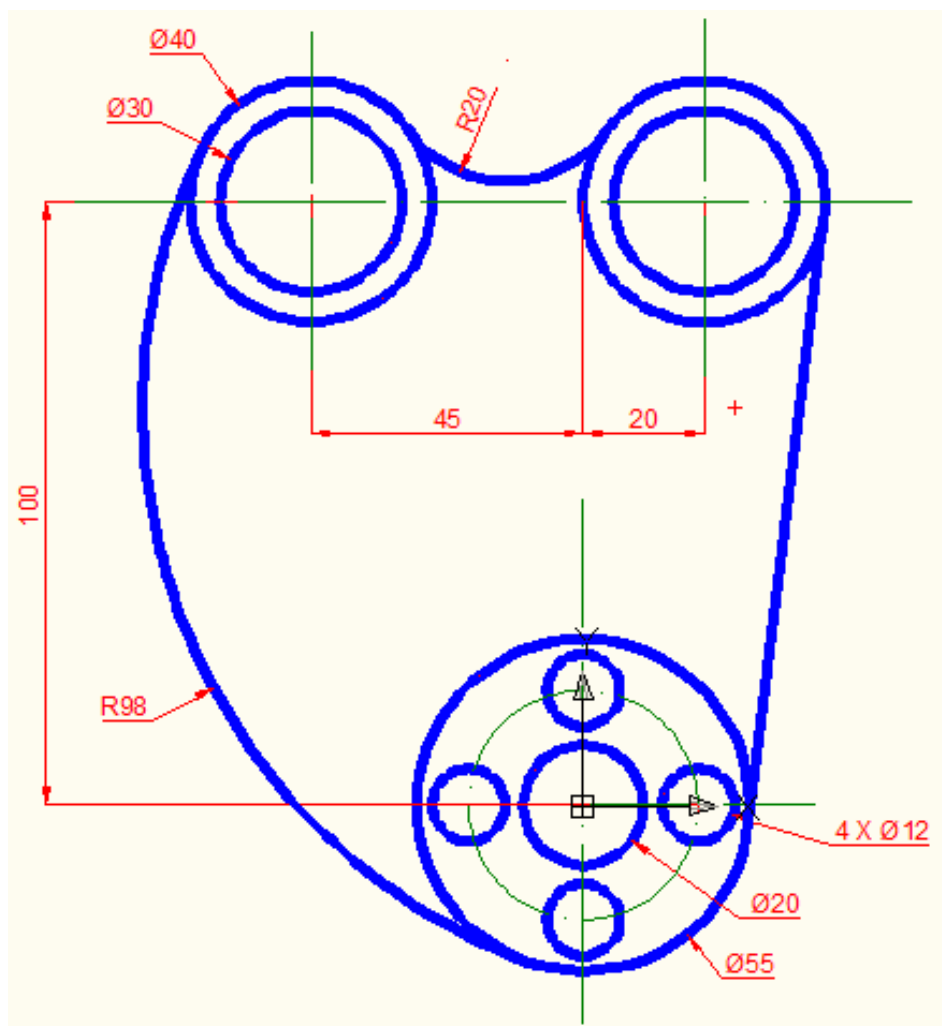


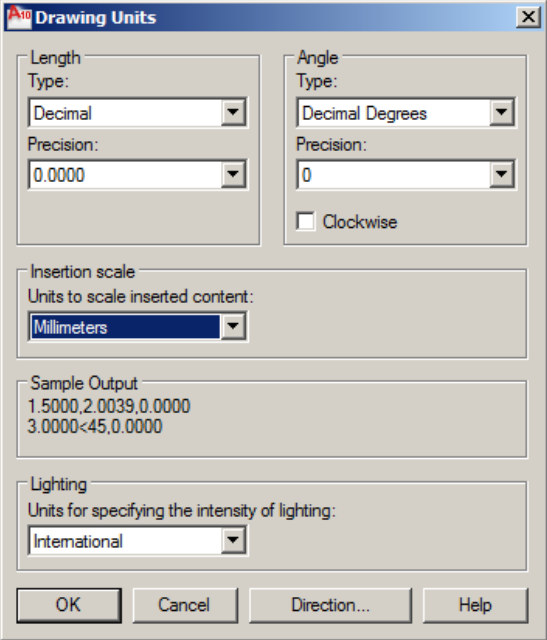
APLICAȚII – COMENZI DE EDITARE

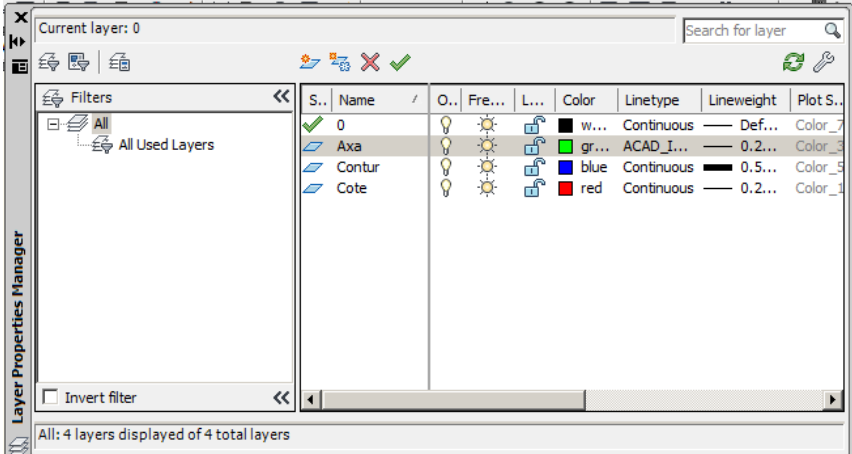
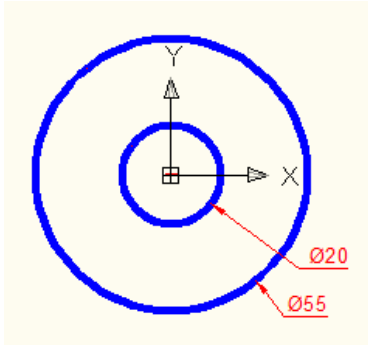
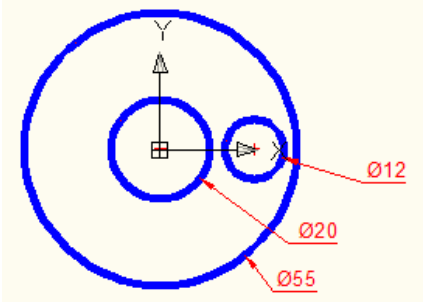
Nr crt	Unitatea de rezultate ale învățării /Rezultate ale învățării			Conținuturile învățării
	Cunoștințe	Abilități	Atitudini	
1	9.1.6-Comenzi pentru editare	9.2.11. Utilizarea comenzilor pentru editare	9.3.4. Spirit de inițiativa și responsabilitate în rezolvarea problemelor; 9.3.5. Abilitatea de a tolera schimbarea și buna adaptare la situații de criză și incertitudini.	6.Comenzi pentru editare (modificare și construcție) 6.1.Generalități (bara Modify, meniul Modify) 6.2.Comenzi: ERASE, COPY, MIRROR, OFFSET, ARRAY, MOVE, ROTATE, SCALE, STRETCH, TRIM, EXTEND, BREAK, ALIGN, LENGTHEN, CHAMFER, FILLET, EXPLODE.

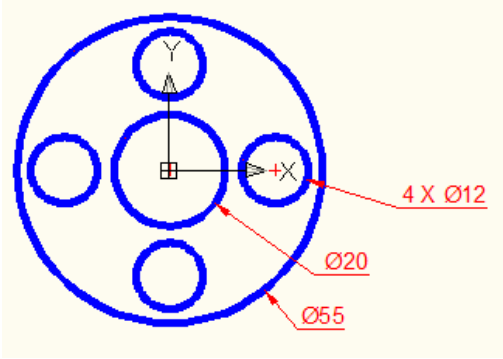
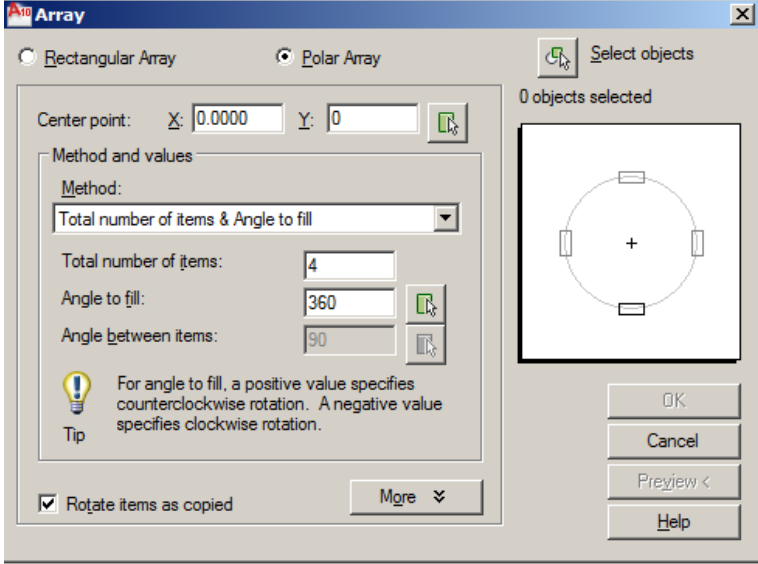
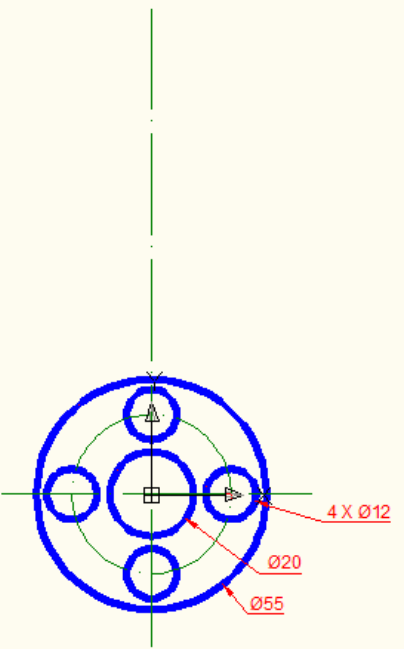
Să se realizeze desenul de mai jos în programul AutoCAD având în vedere:

- Stabilirea originii sistemului de axe XOY;
- Alegerea formatului;
- Alegerea unității de măsură: milimetru;
- Construirea layerelor: contur, axe, cote;
- Utilizarea comenzilor de desenare și editare.



Nr. crt.	Comenzi	Desen
1.	<p>Alegerea unității de măsură: milimetru <i>Command: units</i></p>	
2.	<p>Alegerea formatului A4 <i>Command: limits</i> <i>Reset Model space limits:</i> <i>Specify lower left corner or [ON/OFF]</i> <i><0.0000,0.0000>: 0,0</i> <i>Specify upper right corner</i> <i><210.0000,297.0000>: 210,297</i></p>	

Nr. crt.	Comenzi	Desen
3.	Construirea Layerelor	
4.	Alegerea originii sistemului XOY Originea se alege în centrul cercurilor de jos	
5.	Desenarea cercurilor cu centru în 0,0 Command: circle Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 0,0 Specify radius of circle or [Diameter]: d Specify diameter of circle: 20	
6.	Desenarea cercului cu centru în 19,0 Command: circle Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 19,0 Specify radius of circle or [Diameter] <27.5000>: d Specify diameter of circle <55.0000>: 12	

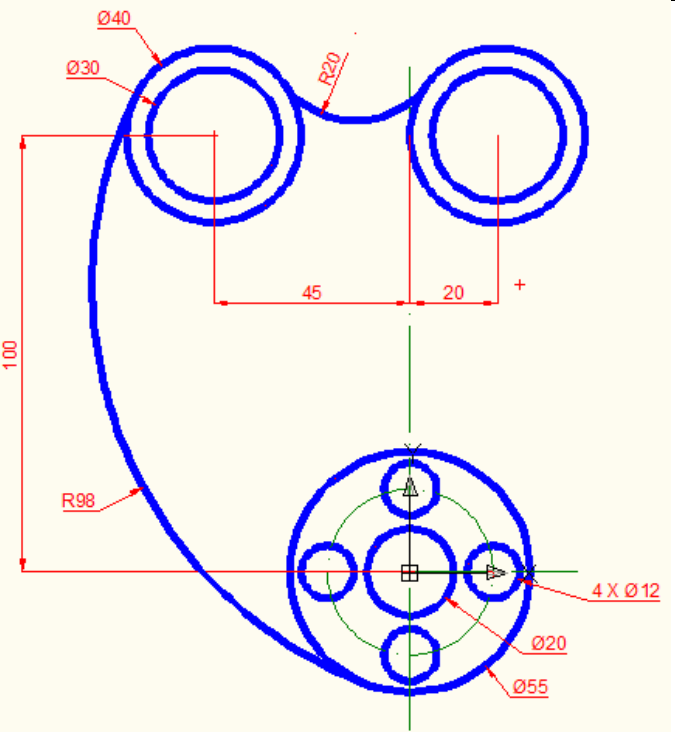
Nr. crt.	Comenzi	Desen
7.	<p>Multiplicare polară a cercului <i>Command: array</i> <i>Select objects: 1 found</i></p>	 
8.	<p>Trasare axe de simetrie <i>Command: circle</i> <i>Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 0,0</i> <i>Specify radius of circle or [Diameter] <6.0000>: d</i> <i>Specify diameter of circle <12.0000>: 38</i> <i>Command: line</i></p>	

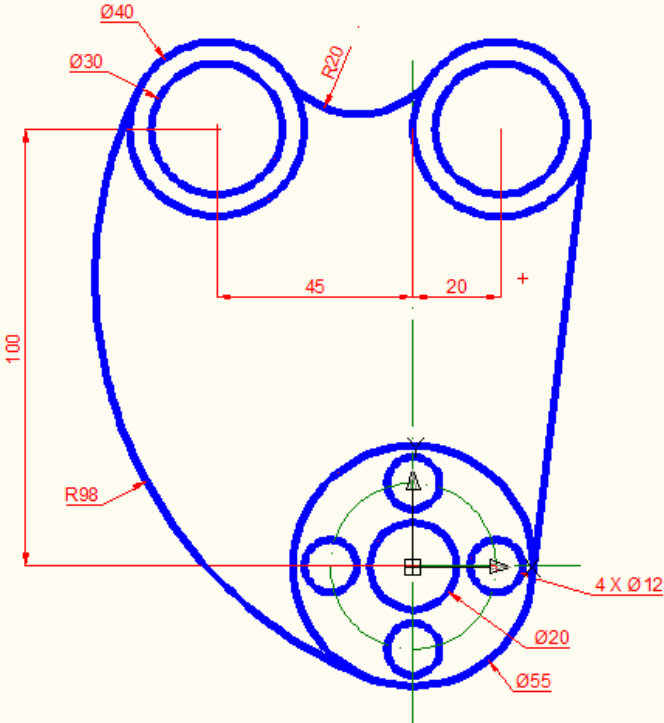
Nr. crt.	Comenzi	Desen
9.	<p>Desenarea cercurilor cu centru în -45,100 Command: circle Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: -45,100 Specify radius of circle or [Diameter] <19.0000>: d Specify diameter of circle <38.0000>: 30 Command: circle Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: -45,100 Specify radius of circle or [Diameter] <10.0000>: d Specify diameter of circle <20.0000>: 40</p>	<p>The drawing illustrates the construction of circles in a CAD environment. The top view shows two concentric circles with diameters of 40 and 30. The bottom view shows a larger circle with a diameter of 55, containing four smaller circles with a diameter of 12. A vertical dimension of 100 and a horizontal dimension of 45 are shown. Labels include Ø40, Ø30, 4 X Ø12, Ø20, and Ø55.</p>

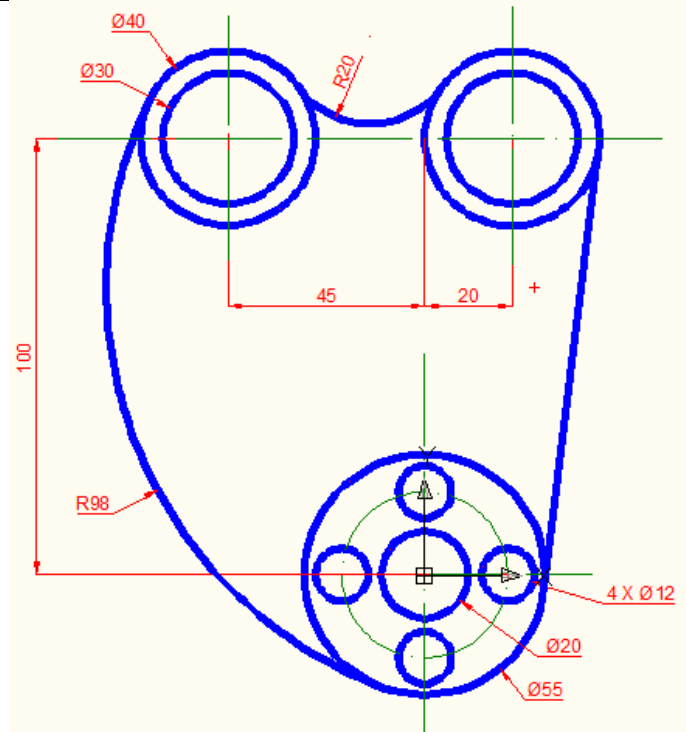
Nr. crt.	Comenzi	Desen
10.	<p>Desenarea cercurilor cu centru în 20,100</p> <p>VARIANTA 1 Command: circle Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 20,100 Specify radius of circle or [Diameter] <19.0000>: d Specify diameter of circle <38.0000>: 30 Command: circle Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: 20,100 Specify radius of circle or [Diameter] <10.0000>: d Specify diameter of circle <20.0000>: 40</p> <p>VARIANTA 2 Command: _copy Select objects: 1 found Select objects: Specify opposite corner: 1 found, 2 total Select objects: Current settings: Copy mode = Multiple Specify base point or [Displacement/mOde] <Displacement>: -45,100 Specify second point or <use first point as displacement>: 20,100 Specify second point or [Exit/Undo] <Exit>: *Cancel*</p>	<p>The drawing illustrates two methods for creating circles in a CAD environment. Variant 1 shows two concentric circles centered at coordinates (20, 100). The inner circle has a diameter of 30 (Ø30) and the outer circle has a diameter of 40 (Ø40). Variant 2 shows a large circle with a diameter of 55 (Ø55) and four smaller circles with a diameter of 12 (Ø12), arranged symmetrically around the center (20, 100). The vertical distance from the center to the top of the large circle is 100. The horizontal distance from the center to the center of the small circles is 45. The diameter of the small circles is 12, and there are 4 of them (4 X Ø12).</p>

Nr. crt.	Comenzi	Desen
11.	<p>Trasarea racordării cu raza de 20 Command: <code>_fillet</code> Current settings: Mode = TRIM, Radius = 0.0000 Select first object or [Undo/Polyline/Radius/Trim/Multiple]: r Specify fillet radius <0.0000>: 20 Select first object or [Undo/Polyline/Radius/Trim/Multiple]: Select second object or shift-select to apply corner: Command: Specify opposite corner:</p>	<p>The drawing illustrates the application of a fillet to two circles. The top view shows two circles with diameters $\varnothing 40$ and $\varnothing 30$, connected by a fillet with a radius of $R20$. The distance between the centers of the two circles is 45 units, and the fillet is positioned 20 units from the center of the smaller circle. The bottom view shows a larger circle with a diameter of $\varnothing 55$ containing four smaller circles of diameter $\varnothing 12$ and a central circle of diameter $\varnothing 20$. A vertical dimension of 100 units is shown between the two views.</p>

Nr. crt.	Comenzi	Desen
12.	<p>Trasarea racordării cu raza de 98</p> <p>Command: <code>_circle</code> Specify center point for circle or [3P/2P/Ttr (tan tan radius)]: <code>ttr</code> Specify point on object for first tangent of circle: Specify point on object for second tangent of circle: Specify radius of circle <98.0000>: <code>98</code></p>	

Nr. crt.	Comenzi	Desen
13.	<p>Ștergere arc Command: <code>_trim</code> Current settings: Projection=UCS, Edge=Extend Select cutting edges ... Select objects or <select all>: Specify opposite corner: 27 found 10 were not a valid edge or selection method. 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]: Specify opposite corner: *Cancel*</p>	 <p>The drawing shows a mechanical part with the following features and dimensions:</p> <ul style="list-style-type: none"> Two circular features at the top with diameters $\varnothing 40$ and $\varnothing 30$. A connecting arc between them with a radius of $R20$. A large arc on the left with a radius of $R98$. A central circular feature with a diameter of $\varnothing 55$. Four small circular features arranged in a square pattern within the central feature, each with a diameter of $\varnothing 12$ (labeled as $4 \times \varnothing 12$). A diameter of $\varnothing 20$ is indicated for the inner circle of the central feature. Horizontal dimensions of 45 and 20 are shown between the top features. A vertical dimension of 100 is shown from the top of the left feature to the center of the bottom feature.

Nr. crt.	Comenzi	Desen
14.	<p>Trasare linie tangentă Command: <code>_line</code> Specify first point: <Object Snap Tracking on> >> Specify first point: Specify next point or [Undo]: Specify next point or [Undo]: *Cancel*</p>	 <p>The drawing shows a mechanical part with the following features and dimensions:</p> <ul style="list-style-type: none">Two top circular features with diameters of $\varnothing 40$ and $\varnothing 30$.A fillet with a radius of $R20$ connecting the two top features.A large bottom circular feature with a diameter of $\varnothing 55$.Four small holes arranged in a square pattern within the bottom feature, each with a diameter of $\varnothing 12$ (labeled as $4 \times \varnothing 12$).A fillet with a radius of $R98$ connecting the bottom feature to the side of the part.Dimension lines indicate a vertical distance of 100 from the top of the part to the center of the bottom feature, and a horizontal distance of 45 from the center of the left top feature to the center of the bottom feature.A horizontal distance of 20 is shown from the center of the bottom feature to the right edge of the part.

Nr. crt.	Comenzi	Desen
15.	<p>Trasare axe de simetrie <i>Command: _line Specify first point:</i> <i>Specify next point or [Undo]:</i> <i>Specify next point or [Undo]: *Cancel*</i></p>	 <p>The drawing shows a mechanical part with the following features and dimensions:</p> <ul style="list-style-type: none"> Two circular features at the top with diameters of $\varnothing 40$ and $\varnothing 30$. A fillet with a radius of $R20$ connecting the two top circles. A vertical dimension of 100 from the top center to the center of the bottom circular feature. A horizontal dimension of 45 from the center of the left top circle to the vertical centerline. A horizontal dimension of 20 from the vertical centerline to the center of the right top circle. A large outer radius of $R98$ for the bottom part. A bottom circular feature with a diameter of $\varnothing 55$. Four small holes arranged in a square pattern within the bottom feature, each with a diameter of $\varnothing 12$ (labeled as 4 X $\varnothing 12$). Individual hole diameters of $\varnothing 20$ are also indicated for the holes.