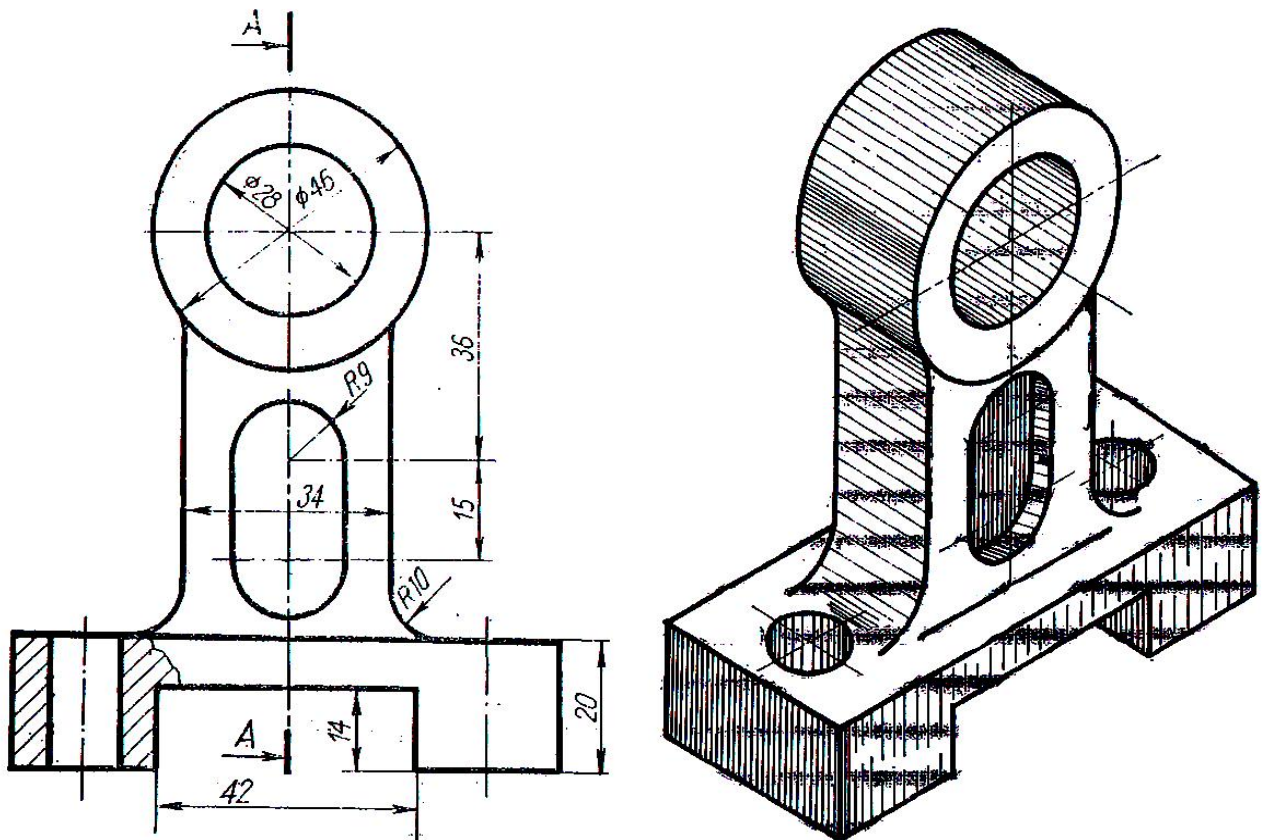


STUDIU PRIVIND REPREZENTAREA ÎN PLAN CU AJUTORUL PROGRAMULUI AutoCAD

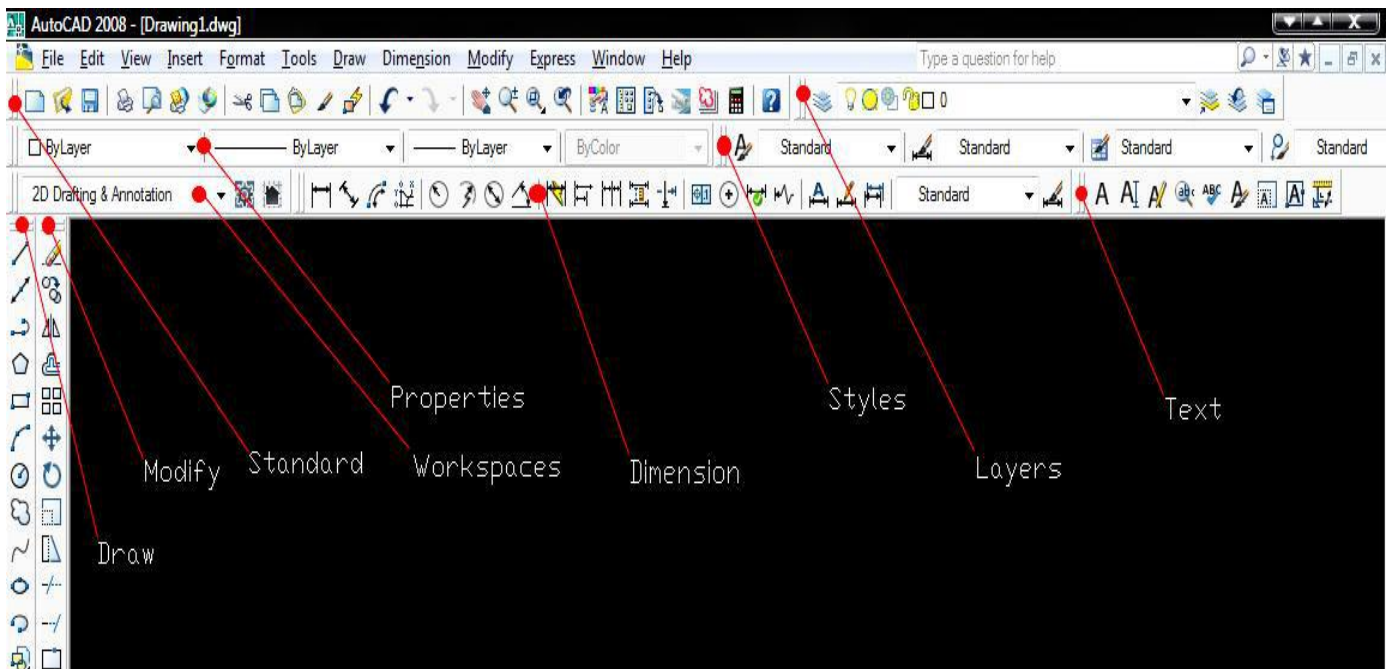
Aplicația 1

Reprezentarea în plan-2D a reperului următor cu ajutorul programului AutoCAD.



Etapele realizării desenului în 2D sunt următoarele:

1. Configurarea spațiului de lucru:



2. Folosind comanda **LIMITS** stabilim formatul paginii (A4: 210x297)

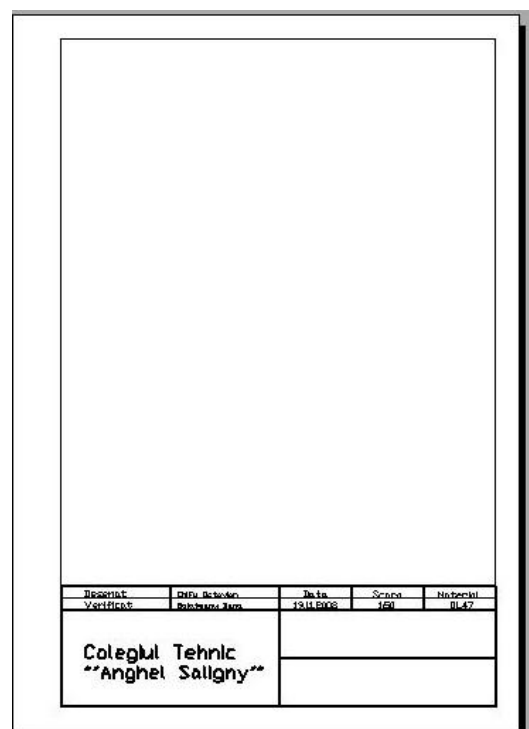
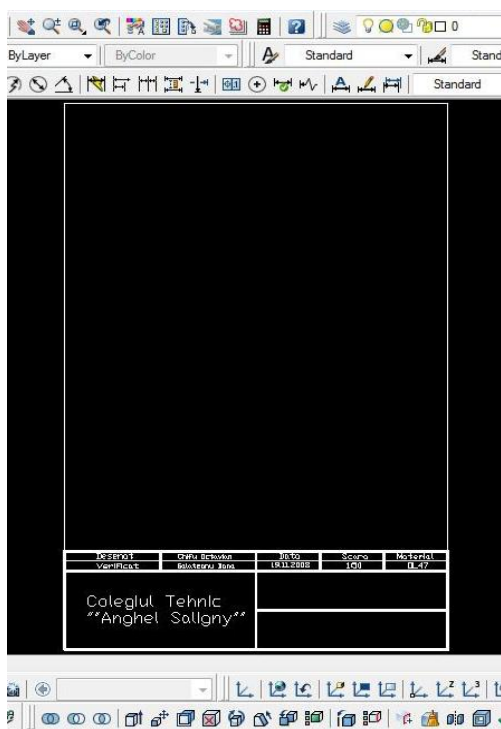
Command: limits

Reset Model space limits:

Specify lower left corner or [ON/OFF] <0.0000,0.0000>: 0,0

Specify upper right corner <12.0000,9.0000>: 210,297

3. Construim chenarul și indicatorul:

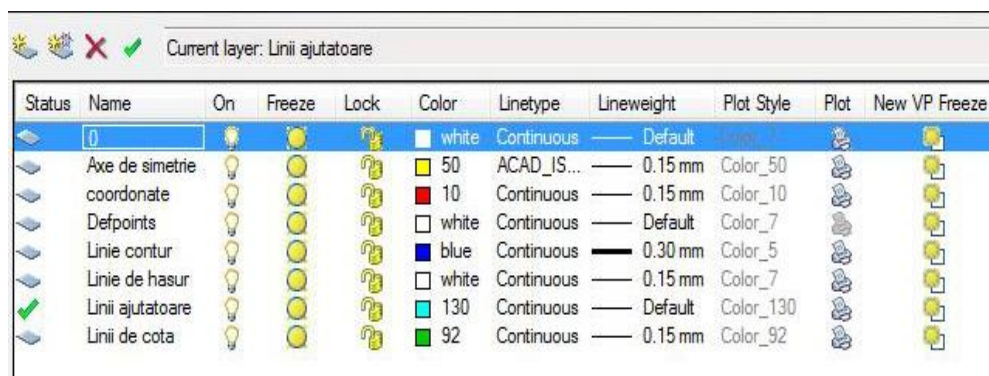


4. Stabilirea Layerelor:



Entitățile desenate pot avea diferite culori, tipuri de linii ca și continuitate sau grosime. Dacă un desen este prea încărcat cu detalii și se dorește accesarea exclusivă a anumitor obiecte de exemplu numai reprezentarea formei unei piese, fără cote, toleranțe, intuim că ar fi utilă o organizare pe grupe de obiecte, care să aibă anumite proprietăți în comun și care să poată fi îndepărtate de pe desen, fără a fi șterse. Aceste

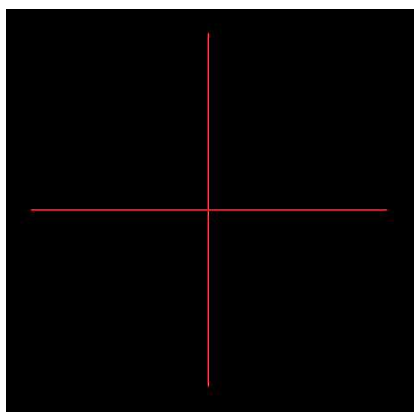
structuri în „straturi” se numesc **LAYERE** și sunt accesate cu comanda **LAYER**. Setările referitoare la proprietățile obiectelor au corespondență în butoanele de pe linia de status a proprietatilor.



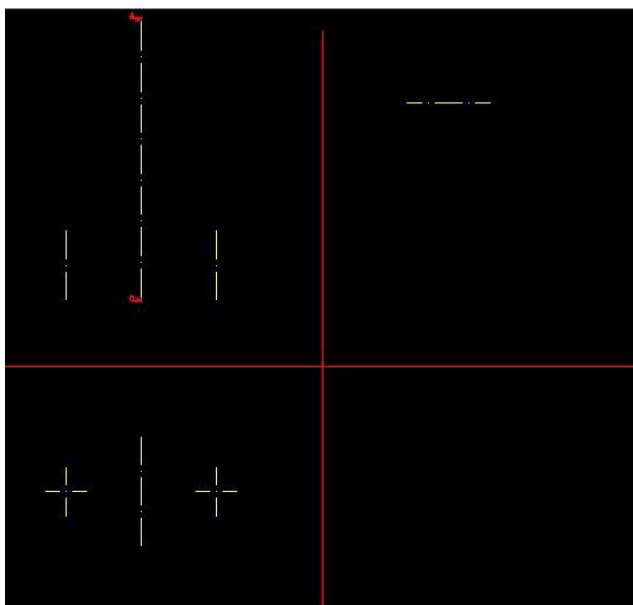
Status	Name	On	Freeze	Lock	Color	Linetype	Lineweight	Plot Style	Plot	New VP Freeze
☑	0	☑	☑	🔒	white	Continuous	Default	Color_7	🖨️	🔒
☑	Axe de simetrie	☑	☑	🔒	50	ACAD_IS...	0.15 mm	Color_50	🖨️	🔒
☑	coordonate	☑	☑	🔒	10	Continuous	0.15 mm	Color_10	🖨️	🔒
☑	Defpoints	☑	☑	🔒	white	Continuous	Default	Color_7	🖨️	🔒
☑	Linie contur	☑	☑	🔒	blue	Continuous	0.30 mm	Color_5	🖨️	🔒
☑	Linie de hasur	☑	☑	🔒	white	Continuous	0.15 mm	Color_7	🖨️	🔒
☑	Linii ajutatoare	☑	☑	🔒	130	Continuous	Default	Color_130	🖨️	🔒
☑	Linii de cota	☑	☑	🔒	92	Continuous	0.15 mm	Color_92	🖨️	🔒

5. In layerul **coordonate** se construiesc axele ce separă planele de proiecție:

Cu ajutorul comenzii **LINE** construim proiectantele care separă planele de proiecție ale epurei, V, H, L.



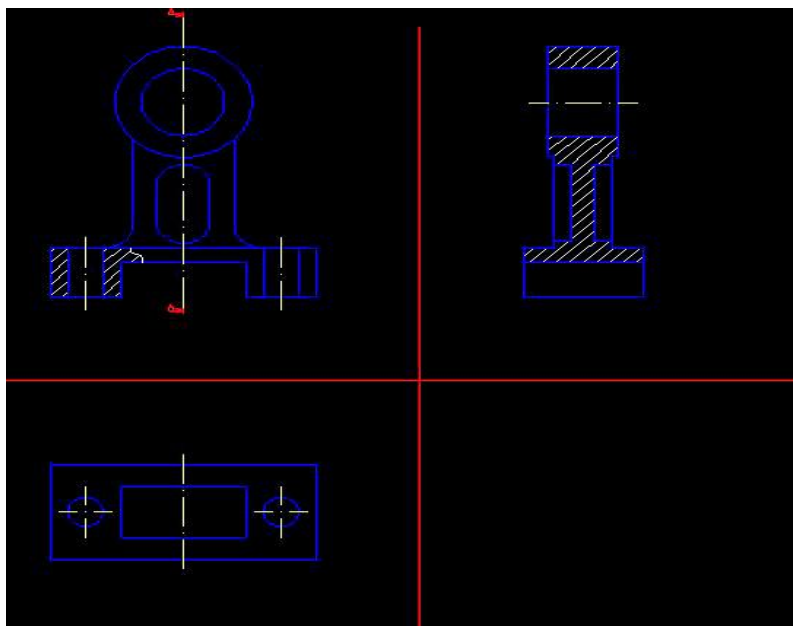
6. In layerul **Axe de simetrie** trasăm axele de simetrie ale piesei:



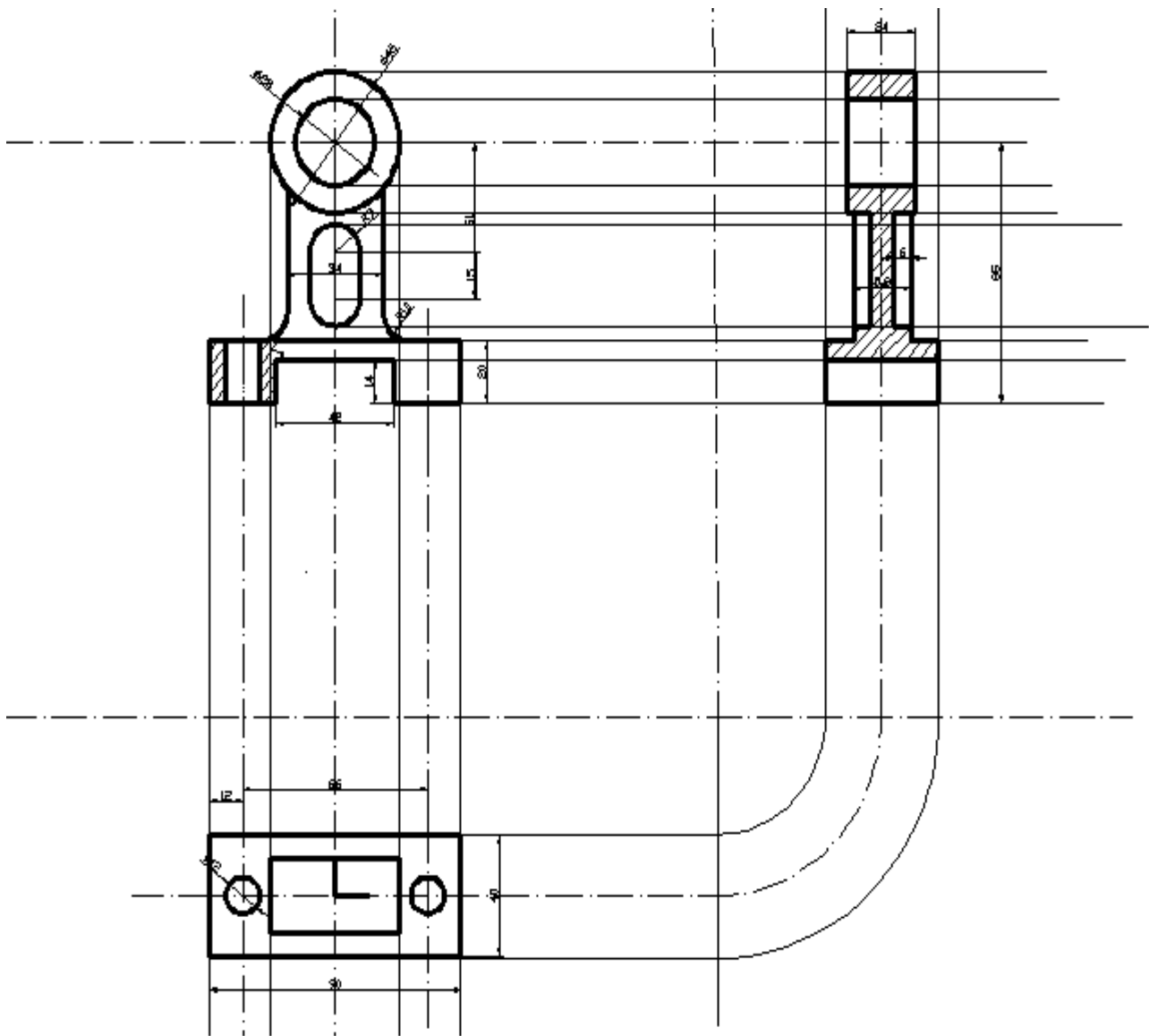
Selectam tipul liniei: ISO dash dot

7. În layerul **Linie contur** desenăm conturul piesei, cu ajutorul comenzii **LINE**, la distanțe egale față de axe de coordonate. Cercurile se vor construi cu ajutorul comenzii **CIRCLE**, iar arcele de cerc cu ajutorul comenzii **ARC**.

Cu ajutorul comenzii **HATCH...** trasăm hașurul piesei, în layerul **Linie de hașur** și obținem:



8. În final cu ajutorul comenzilor din meniul **DIMENSION** se realizează cotarea desenului în layerul **Linii de cotă**.



COMENZI FOLOSITE:

AutoCAD menu utilities loaded.

Command: `_circle` Specify center point for circle or [3P/2P/Ttr (tan tan
Specify radius of circle or [Diameter] <23.0000>: *

Command: `_circle` Specify center point for circle or [3P/2P/Ttr (tan tan
Specify radius of circle or [Diameter] <23.0000>: 9

Specify next point or [Undo]: 15

Command: `_circle` Specify center point for circle or [3P/2P/Ttr (tan tan
Specify radius of circle or [Diameter] <9.0000>: 9

Select object to trim or shift-select to extend or
[Fence/Crossing/Project/Edge/eRase/Undo]:

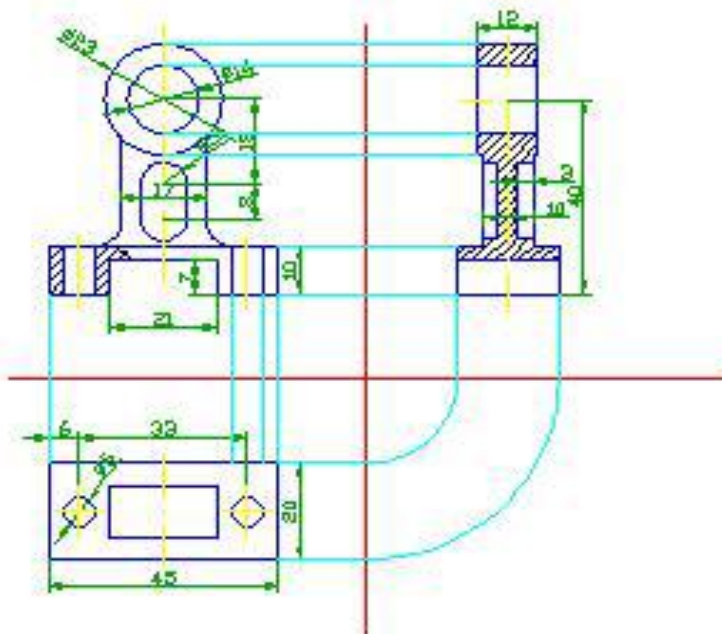
Current settings: Projection=UCS, Edge=Extend

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:
Specify next point or [Undo]: 65
Command: _line Specify first point:
Specify next point or [Undo]: 45
Specify next point or [Undo]: 20
Specify next point or [Close/Undo]: 24
Specify next point or [Close/Undo]: 14
Specify next point or [Close/Undo]: 42
Specify next point or [Close/Undo]: 14
Specify next point or [Close/Undo]: 24
Specify next point or [Close/Undo]: 220
Specify next point or [Close/Undo]: 20
Current settings: Erase source=No Layer=Source OFFSETGAPTYPE=0
Specify offset distance or [Through/Erase/Layer] <1.0000>: 17
OFFSET
Current settings: Erase source=No Layer=Source OFFSETGAPTYPE=0
Specify offset distance or [Through/Erase/Layer] <17.0000>: *
OFFSET
Current settings: Erase source=No Layer=Source OFFSETGAPTYPE=0
Specify offset distance or [Through/Erase/Layer] <17.0000>:
Specify point on side to offset or [Exit/Multiple/Undo] <Exit>: *
Current settings: Projection=UCS, Edge=Extend
Command: _fillet
Current settings: Mode = TRIM, Radius = 0.0000
Select first object or [Undo/Polyline/Radius/Trim/Multiple]: R
Specify fillet radius <0.0000>: 10
Select first object or [Undo/Polyline/Radius/Trim/Multiple]:
Select second object or shift-select to apply corner:
Command: _fillet
Current settings: Mode = TRIM, Radius = 10.0000
Select first object or [Undo/Polyline/Radius/Trim/Multiple]: R
Specify fillet radius <10.0000>: 10
Select first object or [Undo/Polyline/Radius/Trim/Multiple]:
Command: _line Specify first point:
Specify next point or [Undo]: 33
Command: _offset
Current settings: Erase source=No Layer=Source OFFSETGAPTYPE=0
Specify offset distance or [Through/Erase/Layer] <17.0000>: 6
OFFSET
Current settings: Erase source=No Layer=Source OFFSETGAPTYPE=0
Specify offset distance or [Through/Erase/Layer] <6.0000>: *
OFFSET
Current settings: Erase source=No Layer=Source OFFSETGAPTYPE=0
Specify offset distance or [Through/Erase/Layer] <6.0000>: *
Command: _trim
Command: '_pan
Press ESC or ENTER to exit, or right-click to display shortcut menu.

Command: _spline
Command: _trim
Current settings: Projection=UCS, Edge=Extend
Command: _trim
Current settings: Projection=UCS, Edge=Extend
Command: '_pan
Specify offset distance or [Through/Erase/Layer] <17.0000>: 6
Specify offset distance or [Through/Erase/Layer] <6.0000>: *
Specify offset distance or [Through/Erase/Layer] <6.0000>: *
Command: _trim
Current settings: Projection=UCS, Edge=Extend
Command: '_pan
Press ESC or ENTER to exit, or right-click to display shortcut menu.
Command: _spline
Command: _trim
[Fence/Crossing/Project/Edge/eRase/Undo]: *
Command: _trim
Current settings: Projection=UCS, Edge=Extend
Command: '_pan
Command: _circle Specify center point for circle or [3P/2P/Ttr (tan tan
Specify radius of circle or [Diameter] <9.0000>: D
Specify diameter of circle <18.0000>: 12
Command: _circle Specify center point for circle or [3P/2P/Ttr (tan tan
Specify radius of circle or [Diameter] <6.0000>: D
Specify diameter of circle <12.0000>: 12
Specify next point or [Undo]: 12
Command: _line Specify first point:
Specify next point or [Undo]: 12
Specify next point or [Undo]: 12
Command: _line Specify first point:
Specify next point or [Undo]: 12
Specify next point or [Undo]: 12
Specify next point or [Undo]: 23
Specify next point or [Close/Undo]: 24
Specify next point or [Close/Undo]: 46
Specify next point or [Close/Undo]: 24
Specify next point or [Close/Undo]: 1
Command: '_pan
Command: _trim
Current settings: Projection=UCS, Edge=Extend
Select cutting edges ...
Select object to trim or shift-select to extend or
[Fence/Crossing/Project/Edge/eRase/Undo]:
Command: _saveas
Command: _trim
Current settings: Projection=UCS, Edge=None
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 ...
Command: '_pan
Command: Specify opposite corner: '_layer
Command: '_layer
Command: '_pan
Press ESC or ENTER to exit, or right-click to display shortcut menu.
Command: '_pan
Press ESC or ENTER to exit, or right-click to display shortcut menu.
Command: Specify opposite corner:
Command: _dimlinear
Select arc or circle:
Specify dimension line location or [Mtext/Text/Angle]:
Command: _dimradius
Select arc or circle:
Specify dimension line location or [Mtext/Text/Angle]:
Command: _dimradius
Select arc or circle:
Specify dimension line location or [Mtext/Text/Angle]:
Command: '_pan
Press ESC or ENTER to exit, or right-click to display shortcut menu.
:Command: _dimdiameter
Select arc or circle:
Specify dimension line location or [Mtext/Text/Angle]:
Command: _dimlinear
Specify first extension line origin or <select object>:
Specify second extension line origin:
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Command: _dimlinear
Specify first extension line origin or <select object>:
Specify second extension line origin:
Specify dimension line location or
[Mtext/Text/Angle/Horizontal/Vertical/Rotated]:
Command: _dimlinear
Specify first extension line origin or <select object>:



Depart	Grupa Desenelor	Data	Scara	Material
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Colegiul Tehnic "Anghel Saligny"				

Profesor : Dana Gălățanu
C.T."A. SALIGNY" Bacău