TRUSS .dwg (2 LAB SESSIONS WILL BE SPENT ON THIS DRAWING)

**LAYERS**
- DIMS
- BORDER
- VPORT
- TEXT
- GUSSET PLATE
- 2X4
- HIDDEN LINE

**COLORS**
- RED
- BLUE
- RED
- WHITE
- BLUE
- GREEN
- MAGENTA (HIDDEN LINE TYPE)

**DIMENSION**
LINEAR/ANGULAR/ALIGNED etc.

**BASIC TOOLS USED IN THIS LAB**
- COPY
- OFFSET
- TRIM
- EXTEND
- POLYLINE
- POLAR
DRAWING SCALE:  \( \frac{1}{2}'' = 1' - 0'' \)

DRAWING SCALE FACTOR  \((1/2'' \times 1/12'' = 1/24=24 \text{ SF})\)

DIM STYLE = 24_SCALE  \((1/2'' \times 1/12'' = 1/24=24 \text{ SF})\)

  - FIT TAB (use overall scale of) = 24
    - PRIMARY UNITS = ARCHITECTURAL—PRECISION = 1/8''

TEXT STYLE:
  - STYLE NAME: 24_arial
  - FONT STYLE: ARIAL
  - TEXT HEIGHT: 3''

FORMAT UNITS = ARCHITECTURAL

DRAWING TITLE = PRE-FAB TRUSS

DRAWING # = TR-1

DRAWING SCALE = \( \frac{1}{2}'' = 1' - 0'' \) OR SCALE FACTOR (1:24)

MAKE SURE TO USE USE THE FOOT MARK ( ’ ) WHEN PUTTING IN LENGTHS OF OBJECTS

WHEN IN ARCHITECTURAL UNITS, YOU CAN LEAVE THE "INCH MARK OF, ACAD ASSUMES INCHES IF LEFT BLANK

  - Example 10'-6 ½" CAN BE INPUT AS
    - 10'-6.5
    - 10'6-1/2
    - 10'-6-1/2
    - BUT REMEMBER (10) WITHOUT THE ( ’ ) WILL BE 10 INCHES LONG, NOT TEN FEET

1. SET UP POLAR SNAP TO 30 DEGREES TO DRAW THE ANAGLED LINES
2. **12x18 Corner Gusset Plates**: Draw a 12x18 rectangles then trim what you don’t need, same on 18x24 at the top. Your DWG may not appear exactly as the PDF in the corners at the gusset plates.

**RC Polar**: Click settings and change to 30 deg.
3. MAKE SURE TO USE OSNAPS TO LOCATE POINTS: MIDPOINT, ENDPOINT, PERPENDICULAR etc.

4. FOR THE BRACES BETWEEN THE TOP AND BOTTOM CORDS FIRST FIND THE MIDDLE OF EACH 2X4 FIRST THEN OFFSET THE MIDDLE LINE ON EACH SIDE TO GET THE TOTAL 3.5“ WIDE BRACE

USE POLAR TO DRAW 2 LINES AND OVERLAP AT THE TOP THE TRIM TO DETERMINE THE PEAK

(Tr) TRIM THE LINES
AFTER DRAWN AT 30DEG

USE OFFSET TOOL ON ALL ANGLED LINES AND OFFSET LINES 3.5
TRIM THE BOX
DRW BOX USING POLYLINE TOOL

DRAW LINE USING POLAR AT CORRECT ANGLE FROM PEAK TO BOTTOM CORD—THEN OFFSET TO THE LEFT SIDE; THE EXTEND AND TRIM THAT OFFSET LINE AS NEEDED

ONCE YOU COMPLETE THE LEFT SIDE USE MIRROR AND MIRROR THE BRACES /GUSSETS ETC. TO THE RIGHT SIDE INSTEAD OF REDRAWING EVERYTHING
GUSSET AT BRACE:

OFFSET TOPLINE DN 12” --- TRIM --- DRAW LINE FROM MIDE POINT AT CORRECT ANGLE --- OFFSET THAT LINE 6” ON EACH SIDE --- THE TURN ON OSNAP SETTING INTERSECTION --- TRACE AS SHOWN BELOW USING THE POINTS CREATED WITH THE TEMPORARY LINES YOU OFFSET.