Assignment 7

CAD Mechanical - Part 1

Trim & Zoom Functions

Objectives

In this assignment you will apply the **trim, real time zoom, pan** commands, as well as skills learned in earlier assignments.

Getting Started

- 1. When AutoCAD's menu appears, scroll down and select the **Otto 2016.dwt** template file as you have on the previous assignments.
- 2. Complete the title block and by typing the information into the block. The drawing will be drawn **full scale**.
- 3. Insert the drawing title and drawing number illustrated below:

Tic Tac Toe Board C12

4. Remember to turn the **snap** back **on** while drawing lines and dimensioning the drawing.

Note: If a pop ask for you to make a selection, choose the one that is recommended.

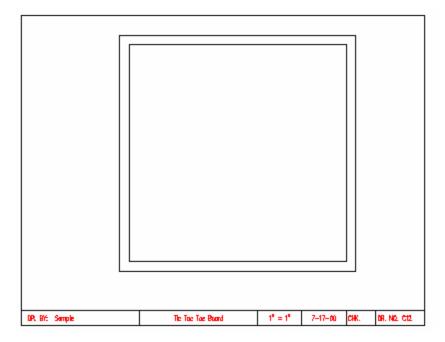
Offset Command

1. After the border appears and you have **changed** to the **object layer**, begin drawing the drawing by constructing a **6**" **square** using **Polyline** command.

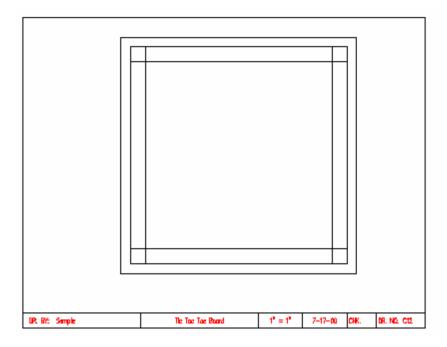
Use the Offset command to produce another polyline 1/4" inside the first one.

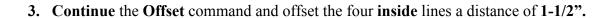
Use the **Explode** command to explode the **inner polyline** into four separate lines.

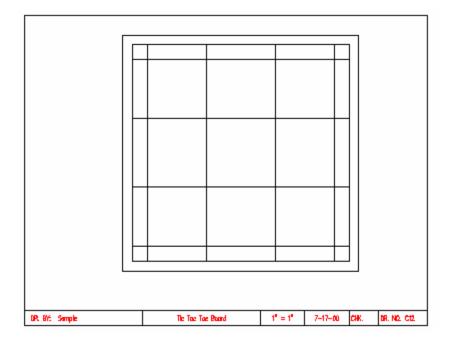
The drawing should now appear as below:



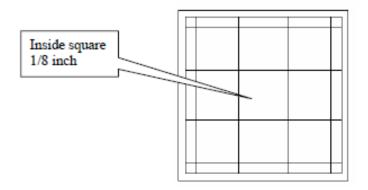
2. Again use the Offset command, and offset the four inside lines 3/8".



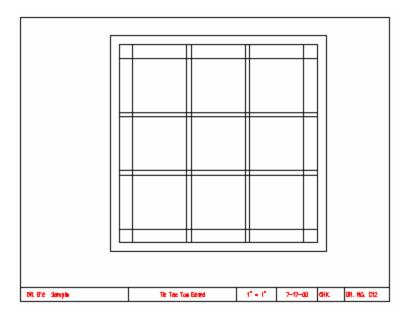




4. Offset the inside square to the inside a distance of 1/8".

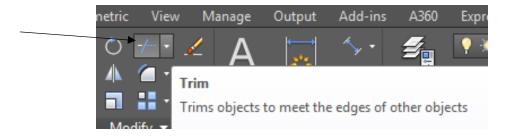


5. The final offset should appear as illustrated.

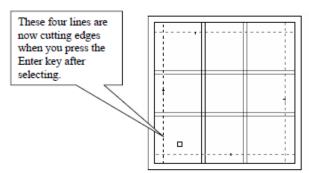


Trim Command

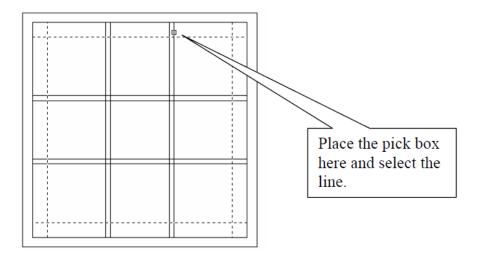
1. Select the Trim command from the Home Tab Ribbon bar options; (Make sure Snap is Off)



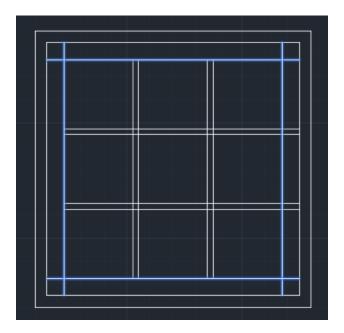
2. Select the four lines shown below and press the Enter key. The selected lines are referred to as the cutting edges.



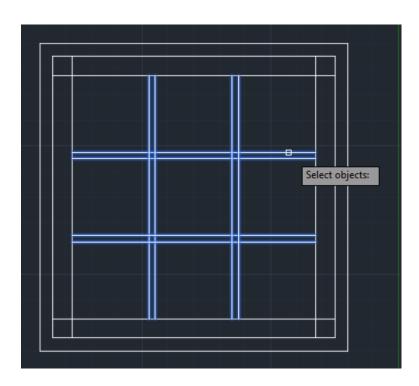
3. The command prompt will alert you to **select** the **object** to **trim**. Place the pick box on the line above the cutting edge as shown.



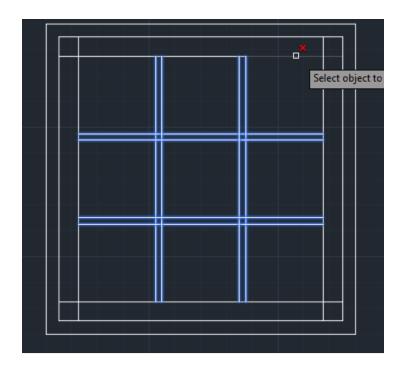
4. When you pick the line at the location above the line is trimmed. Trim the next line to the left of the one just trimmed. Each time you select a line notice that the line is trimmed and a blip remains on the screen. The blips have been left on the illustration to indicate where to continue trimming lines. Continue until these lines are trimmed.



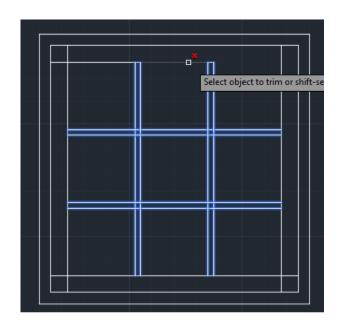
- 5. **Press** the **Enter** key **after trimming** all of the **above lines**. Press Enter again to repeat the Trim command.
- 6. **Repeat** the **Trim** command, but this time **select eight most inner lines** as the cutting edges as shown below:



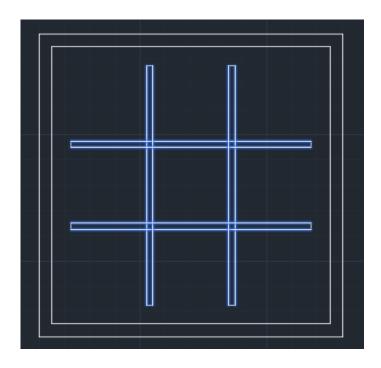
- 7. Press the **Enter key** to **confirm** the **selection of** the **cutting edges**. Pick the **third horizontal** line from the top right of the cutting edge as **shown below**:
- 8. Pick the line to cut it then move the pick box between the two-middle cutting edges.



9. Pick the **middle line** and **move** the **pick** box to the **next location** to the **left** of the line you just trimmed.



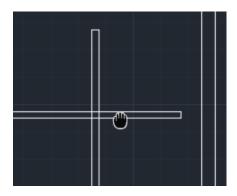
10. Continue picking the other segments on the third inner most line until the drawing appears as shown below:



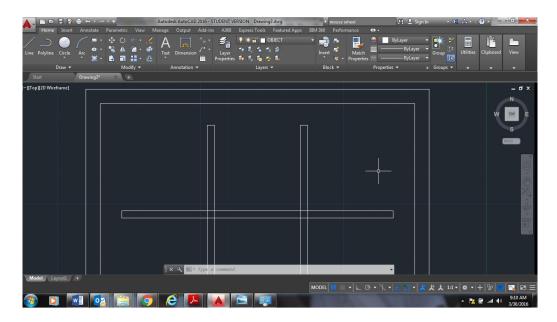
11. When you have trimmed all of the lines, press the **Enter key**.

Zooming in to a Specific Location

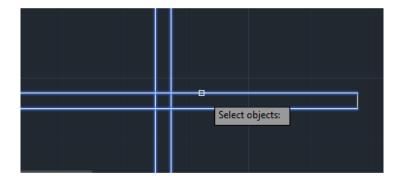
1. Hoover your mouse over one of the intersections and press the wheel. The cursor will change to a hand.



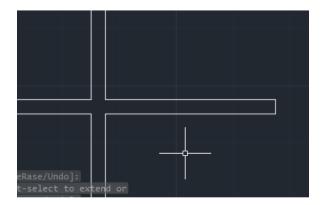
2. With cursor in the shape of a hand, locate the intersection in the center of the drawing area.



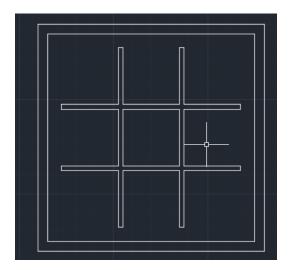
3. Select the trim tool and select the following lines:



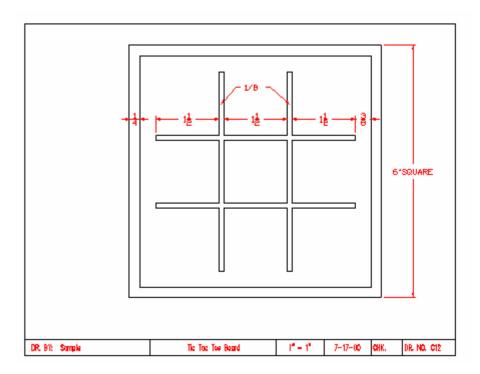
4. Select the **Trim command** again and pick the **innermost lines with** the **pick box**. Press the **Enter key** one time **after selecting** the **cutting edges**.



5. Select the lines as you did in the first section and continue selecting between the cutting edges until all of the lines are trimmed as illustrated:



6. Complete the Tic Toe Board by **constructing** the **necessary dimensions**. Remember to turn the snap back on by clicking the snap button again on the Status bar.



Terms to Know

Trim Zoom Snap