

CE 1102

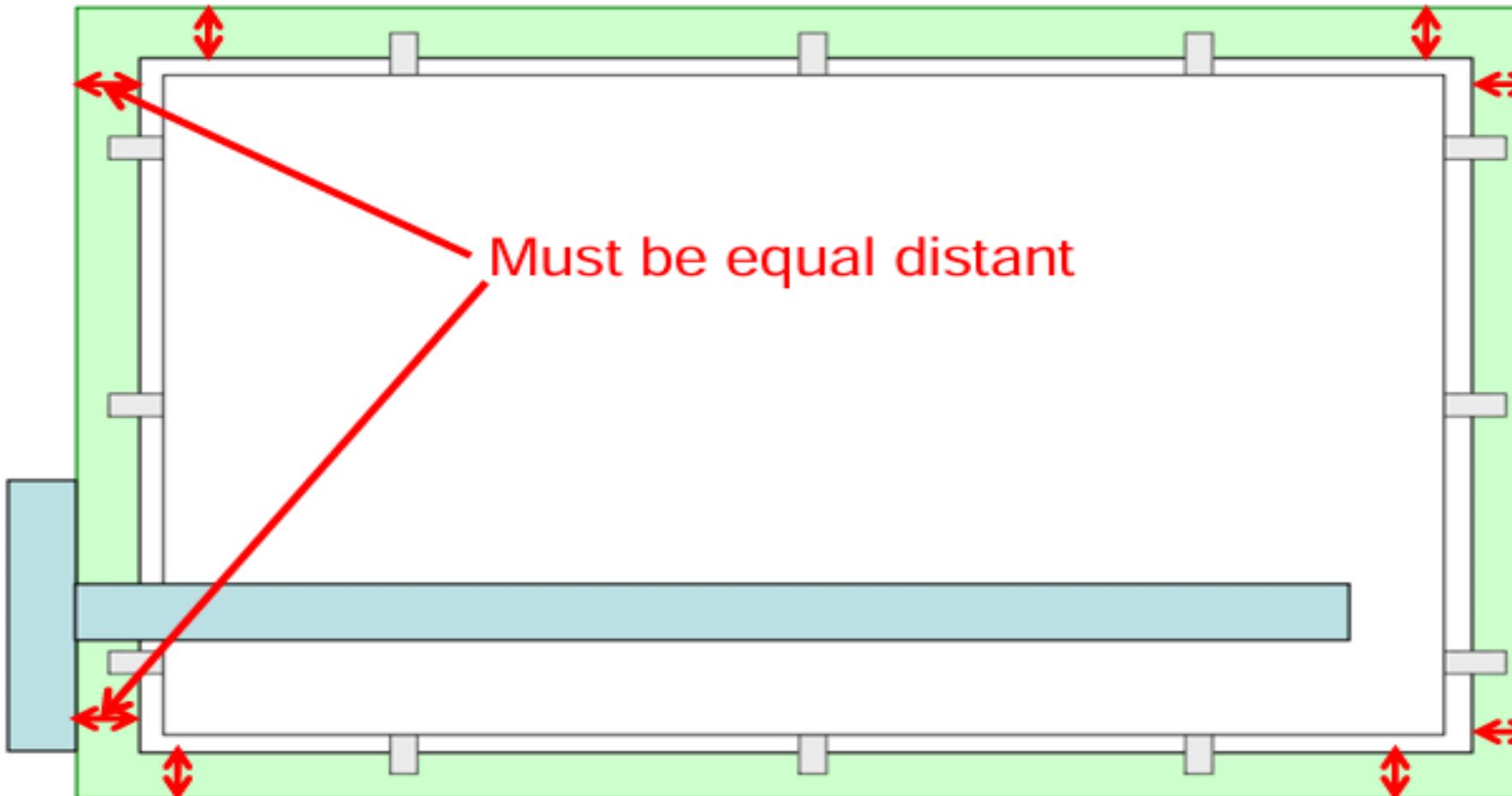
Computer Aided Engineering Drawing

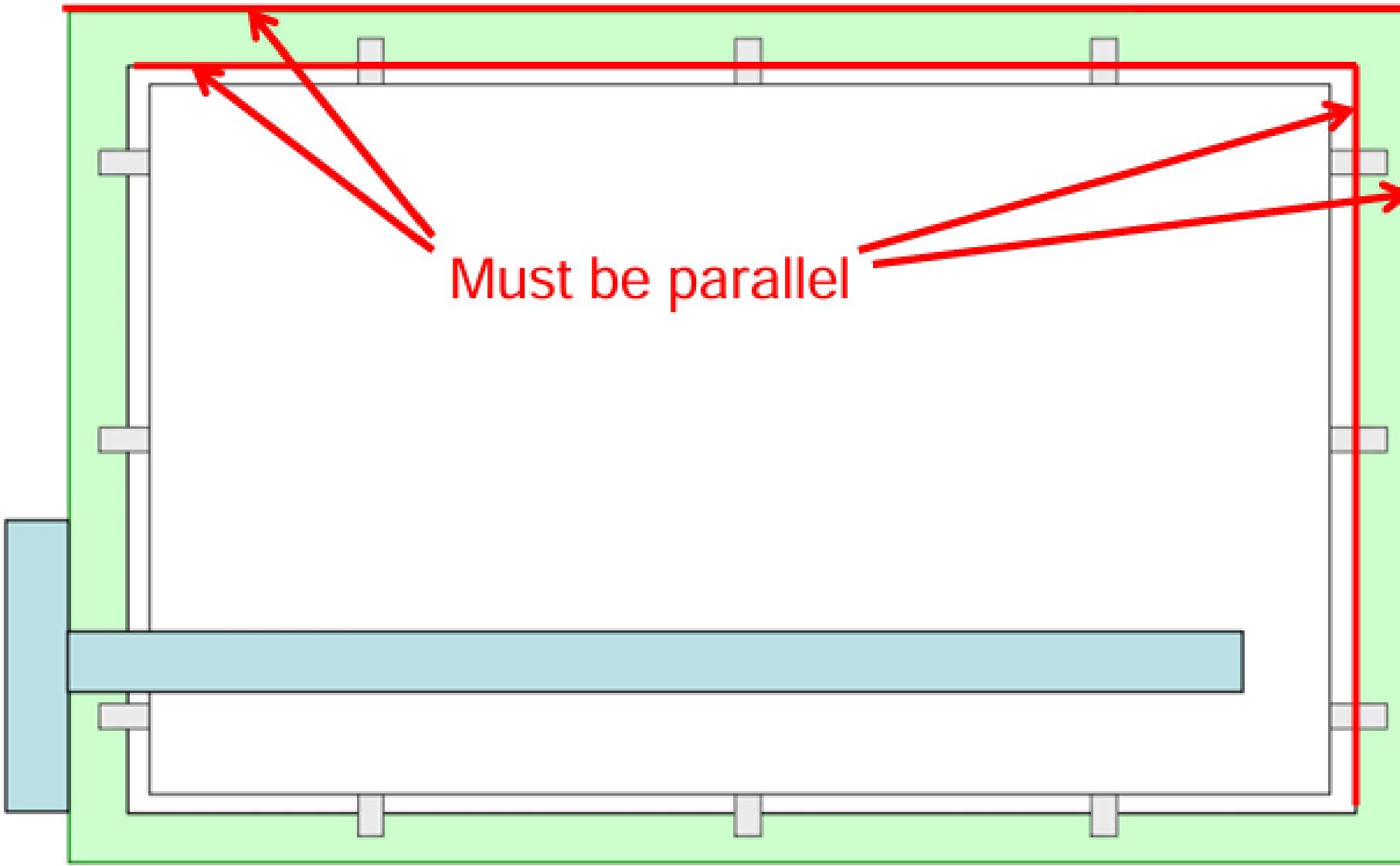
Contact Hours : 3

Credit: 1.5

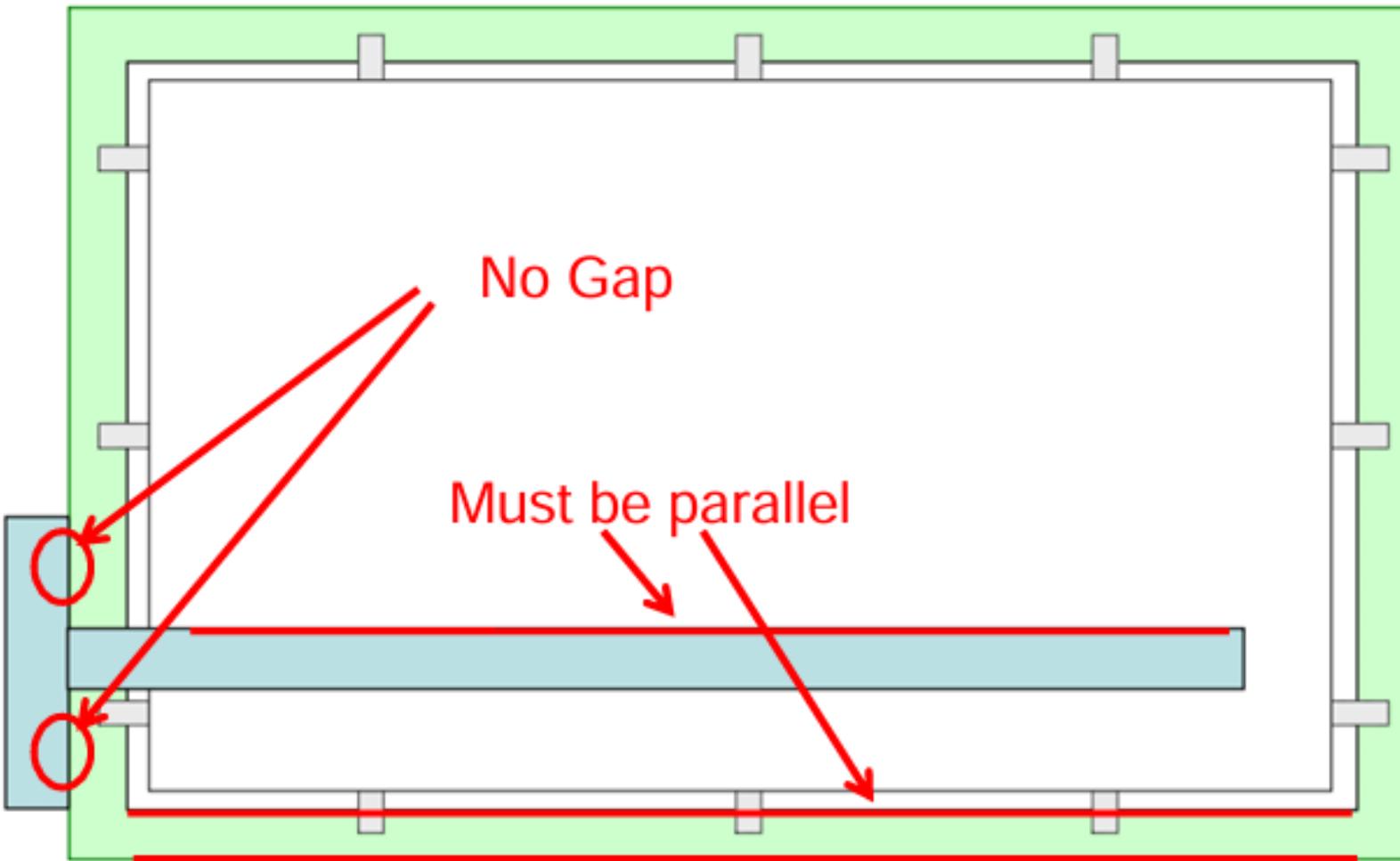
Presented by-
Muaz Bin Ali
Lecturer
Department of CE, MEC

Orientation of Drawing Paper

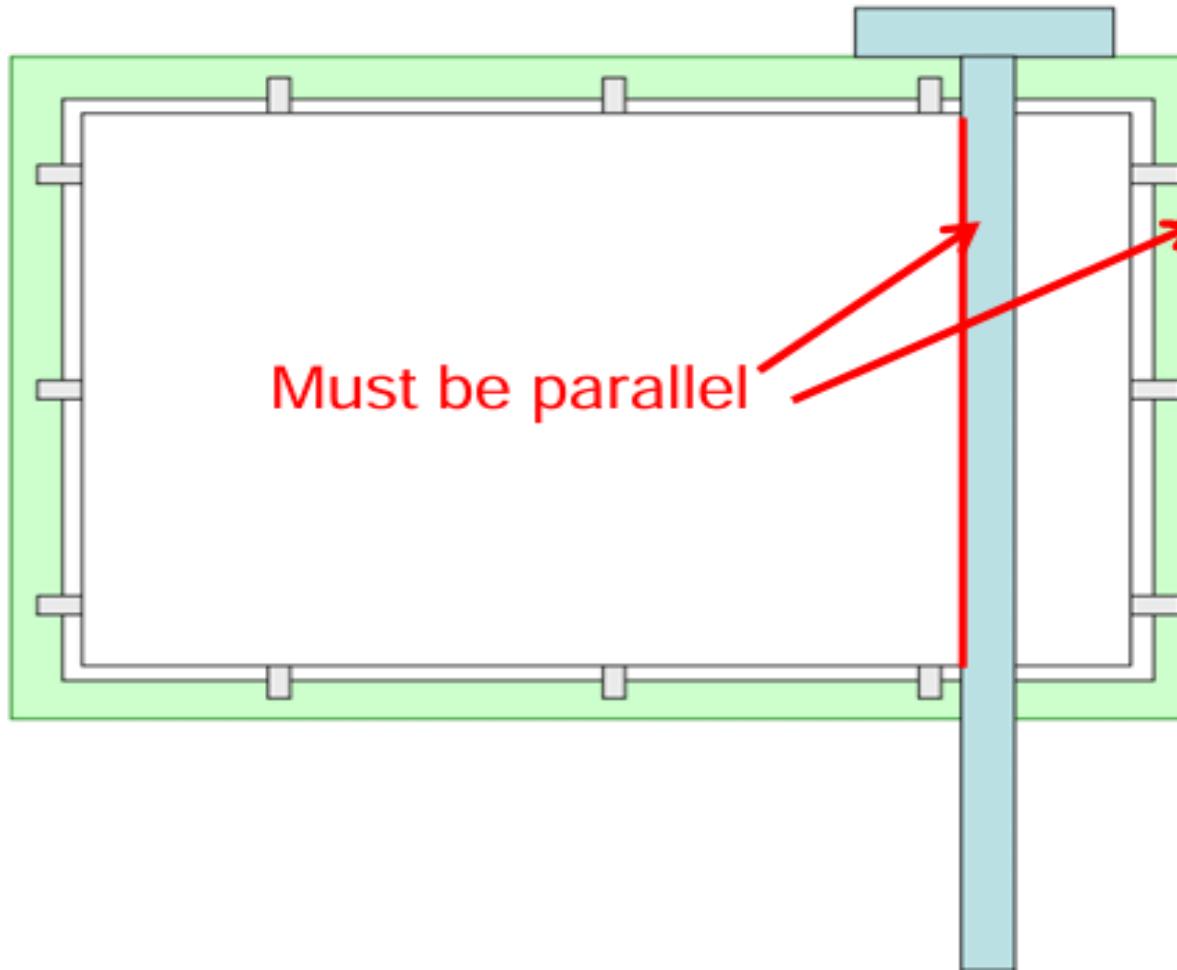




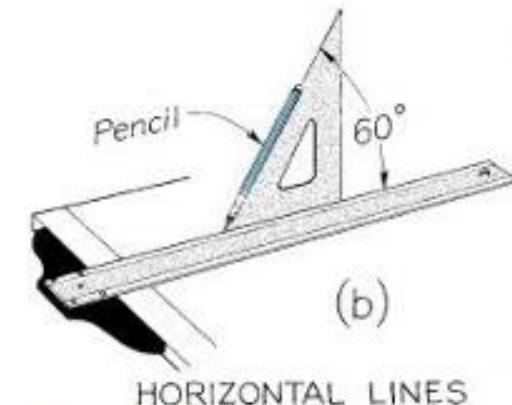
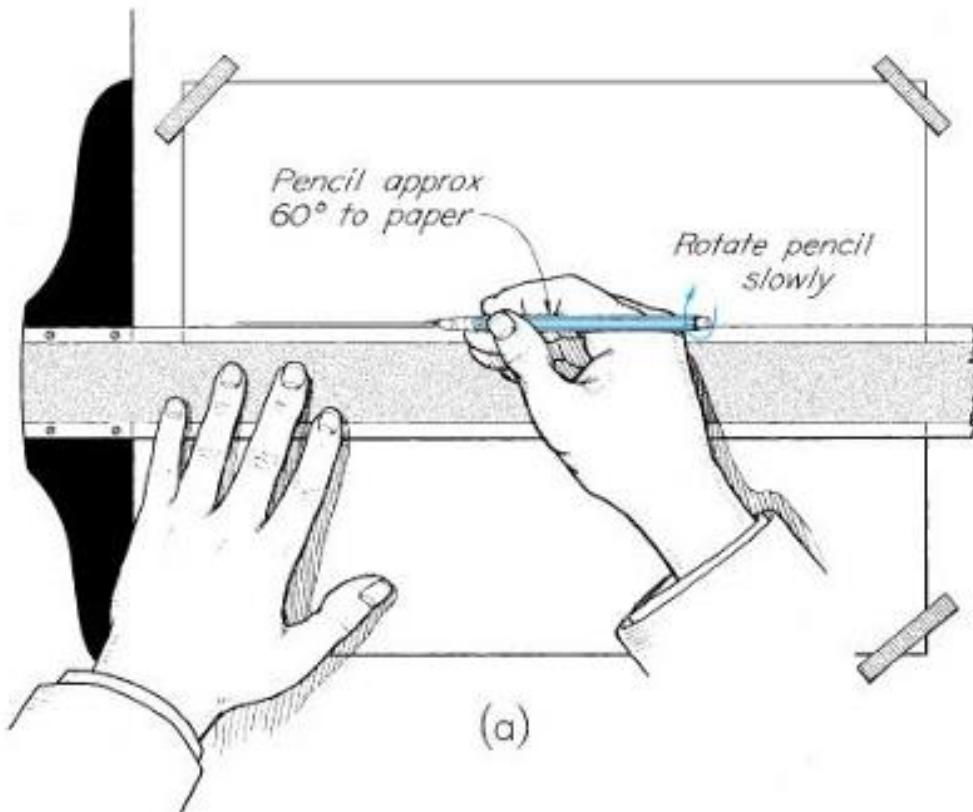
Uses of T-Scale



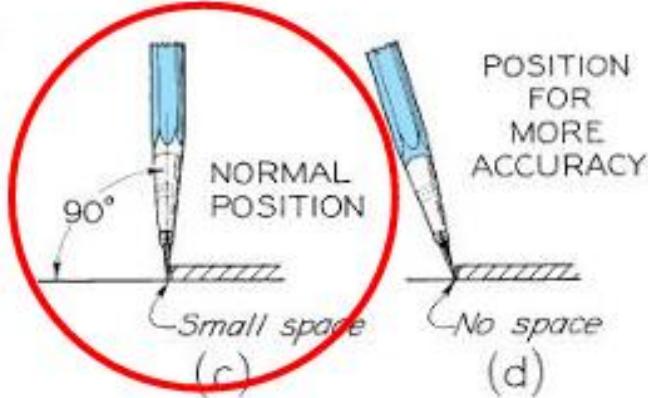
Uses of T-Scale



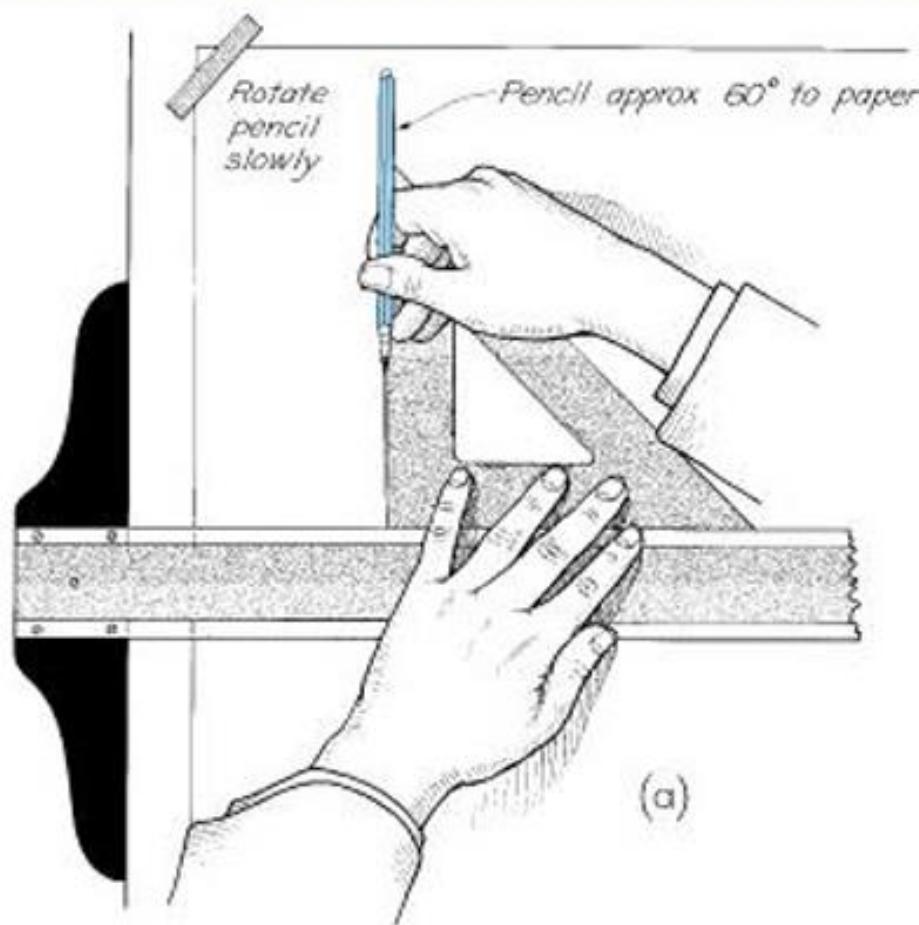
Drawing Horizontal Lines



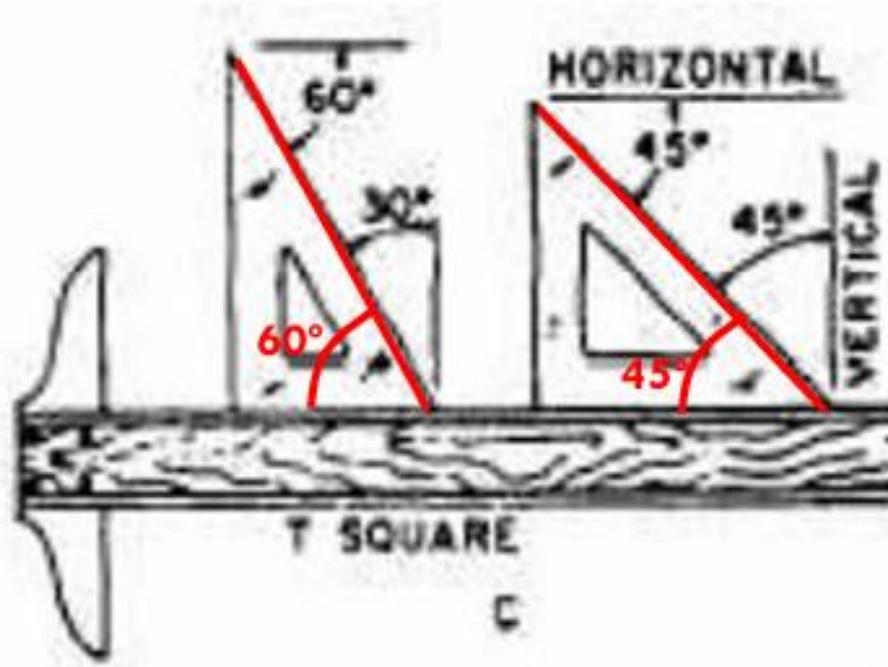
HORIZONTAL LINES



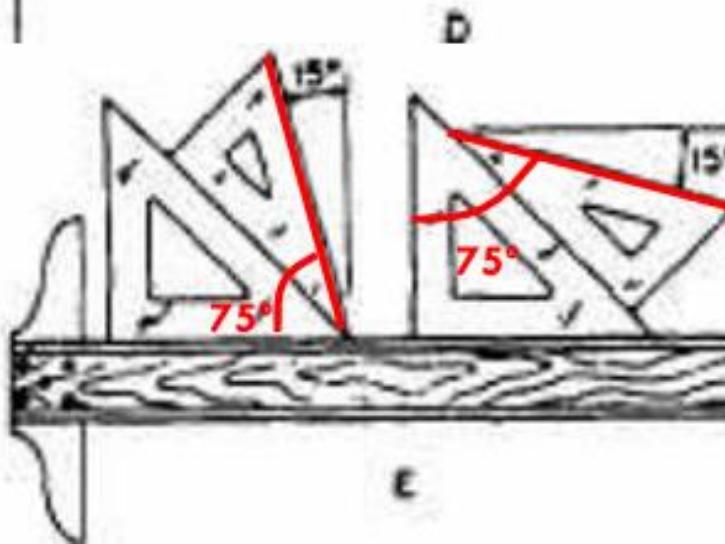
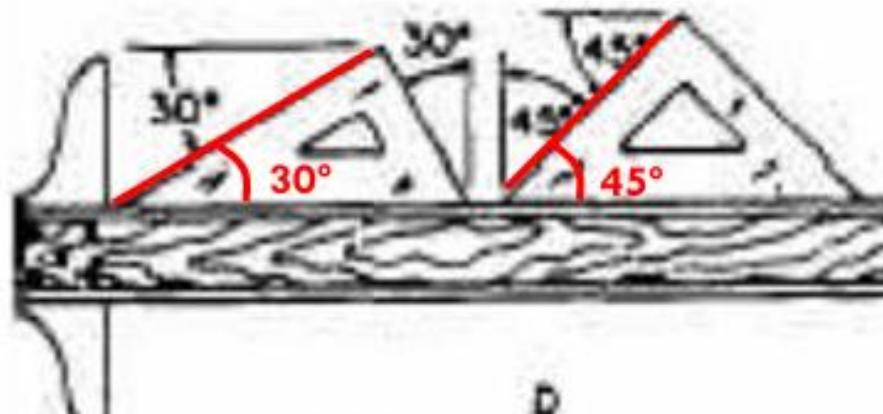
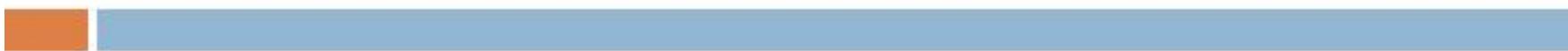
Drawing Vertical Lines



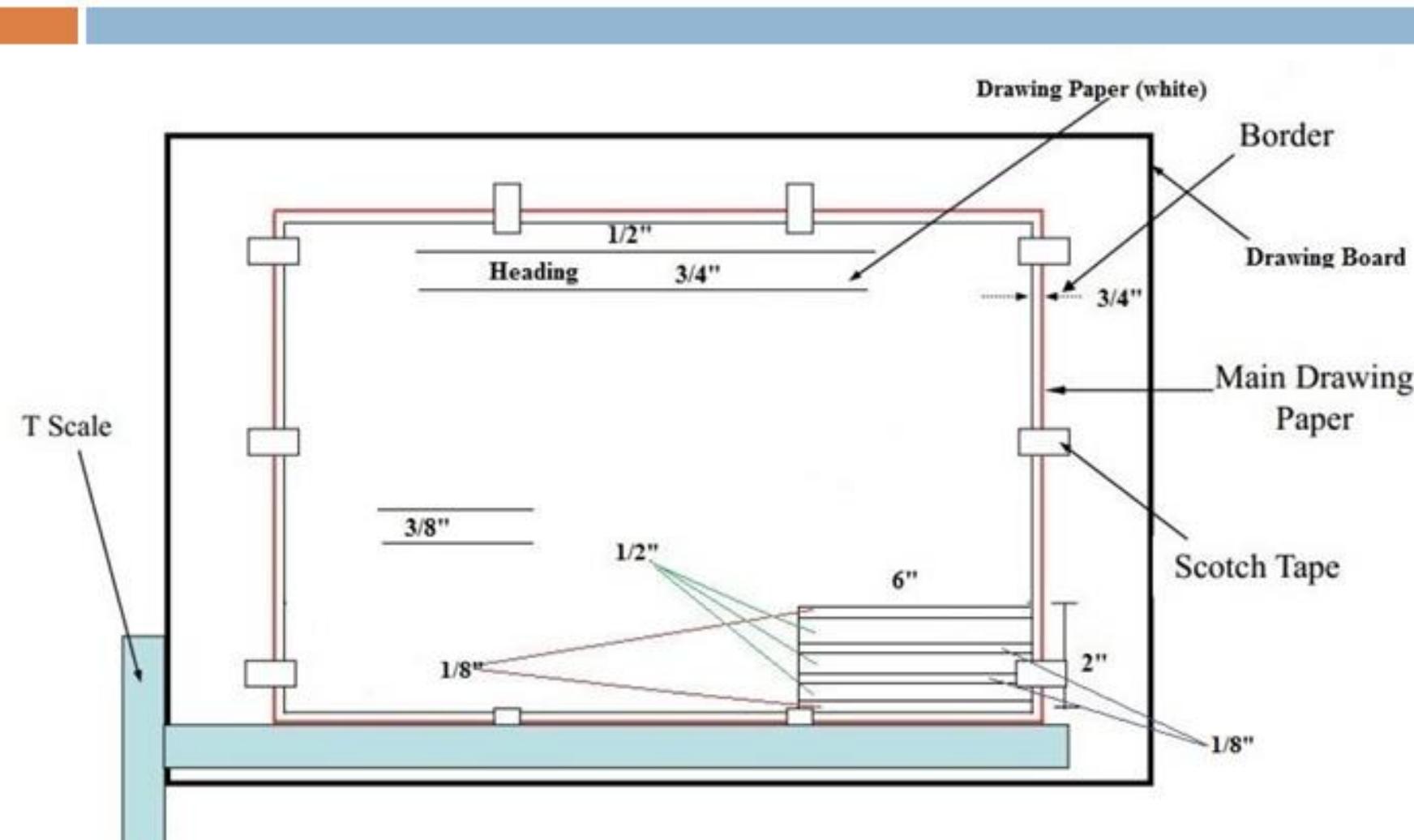
Drawing Inclined Lines



Drawing Inclined Lines



Preparation of Drawing Paper



Lettering



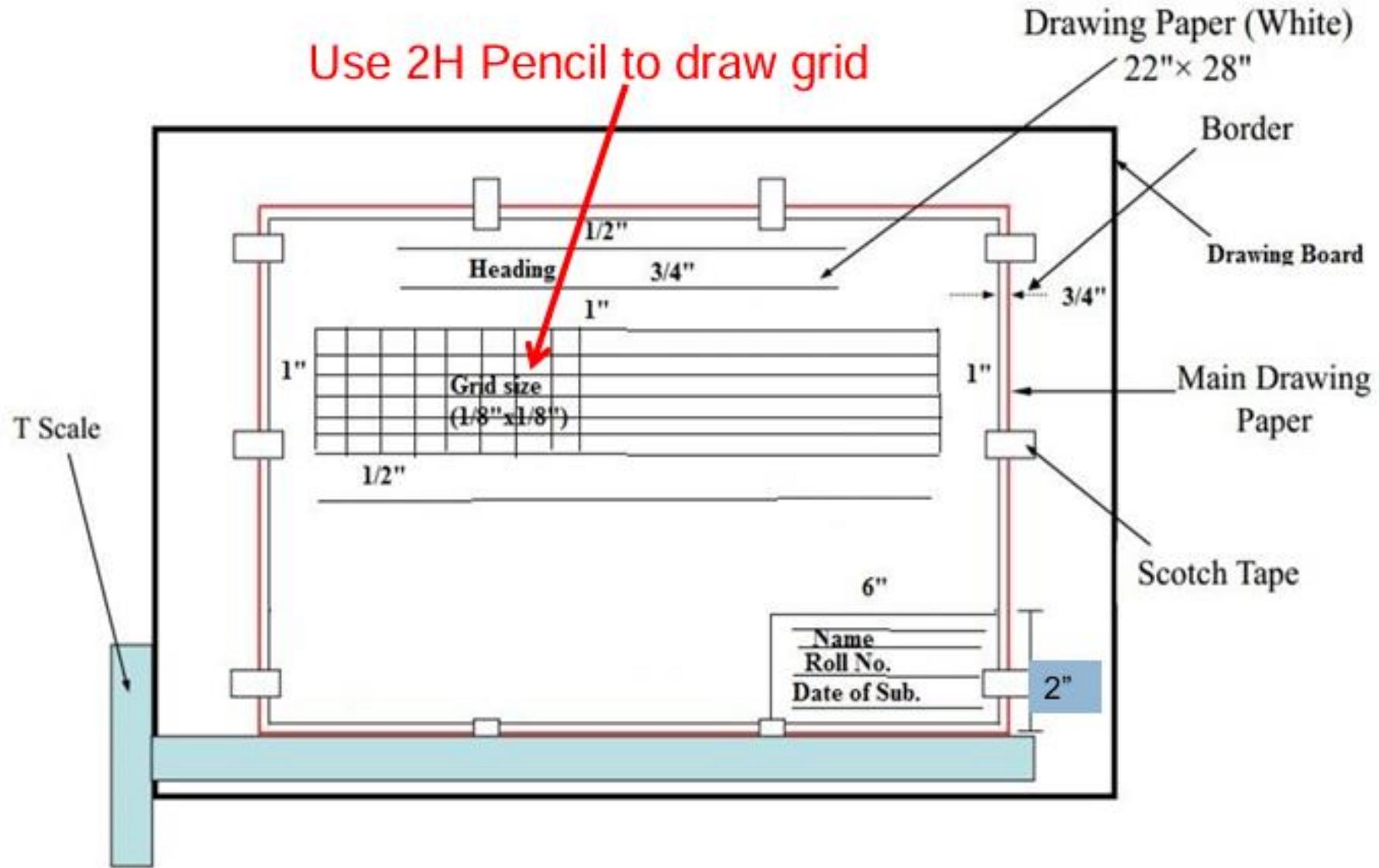
- **Lettering is drawing, not writing.**
- An engineering drawing should provide **dimensions** and **specifications** to communicate how the part is to be made.
- To eliminate errors, these notes must contain words made of **uniform letters** that are neat and easy to read.

Purpose of Neat Lettering



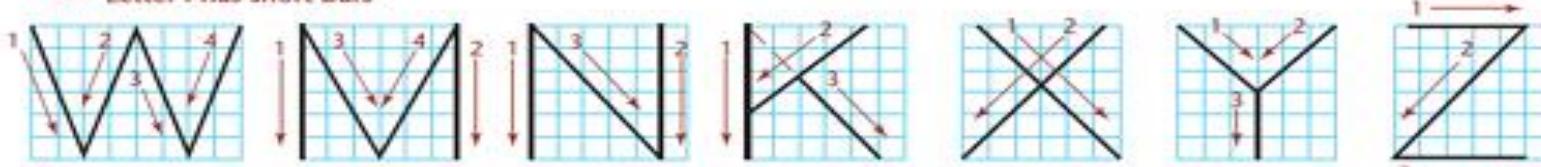
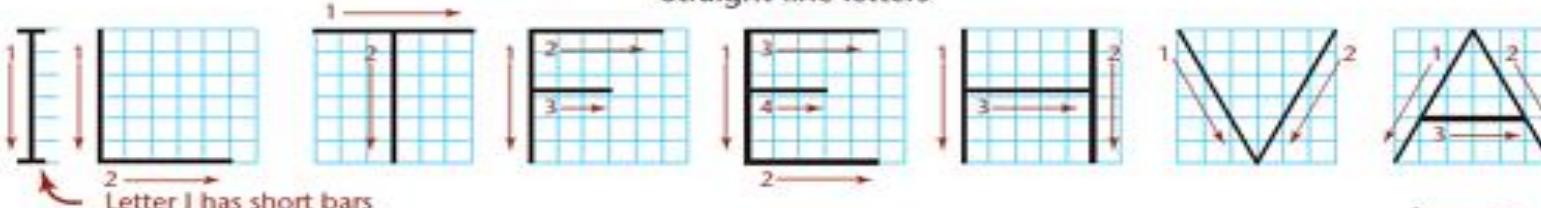
- Most important reason is to convey information without misunderstanding
- Increase overall appearance of the drawing

Use 2H Pencil to draw grid



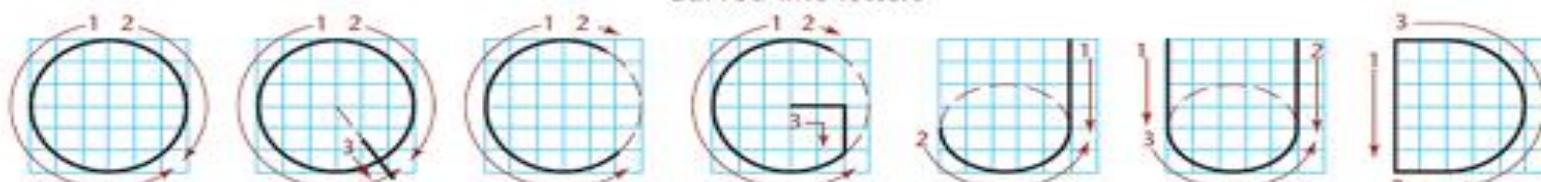
Vertical Capital Letters and Numerals

Straight-line letters



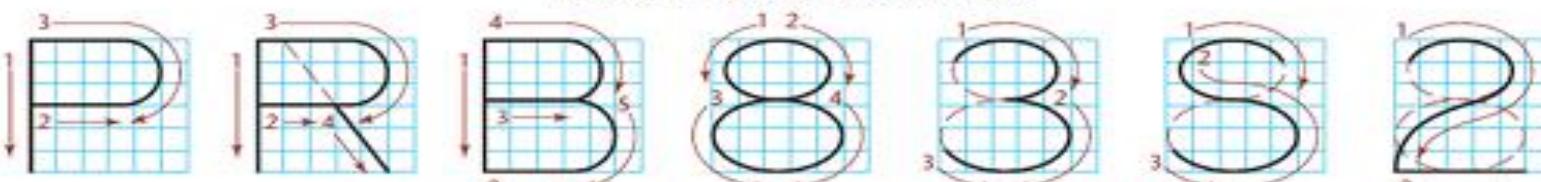
W is only letter over 6 units wide. Letters in "TOM Q. VAXY" are 6 units wide—all others are 5, except I and W

Curved-line letters



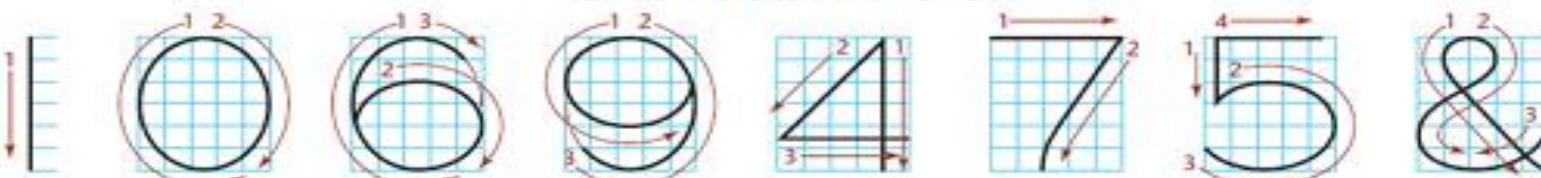
The letters O, Q, C, G and D are based on a true circle. The lower portion of the J and U is elliptical

Curved-line letters and numerals



The 8 is composed of two ellipses. The 3, 5, and 2 are based on the 8

Curved-line letters and numerals



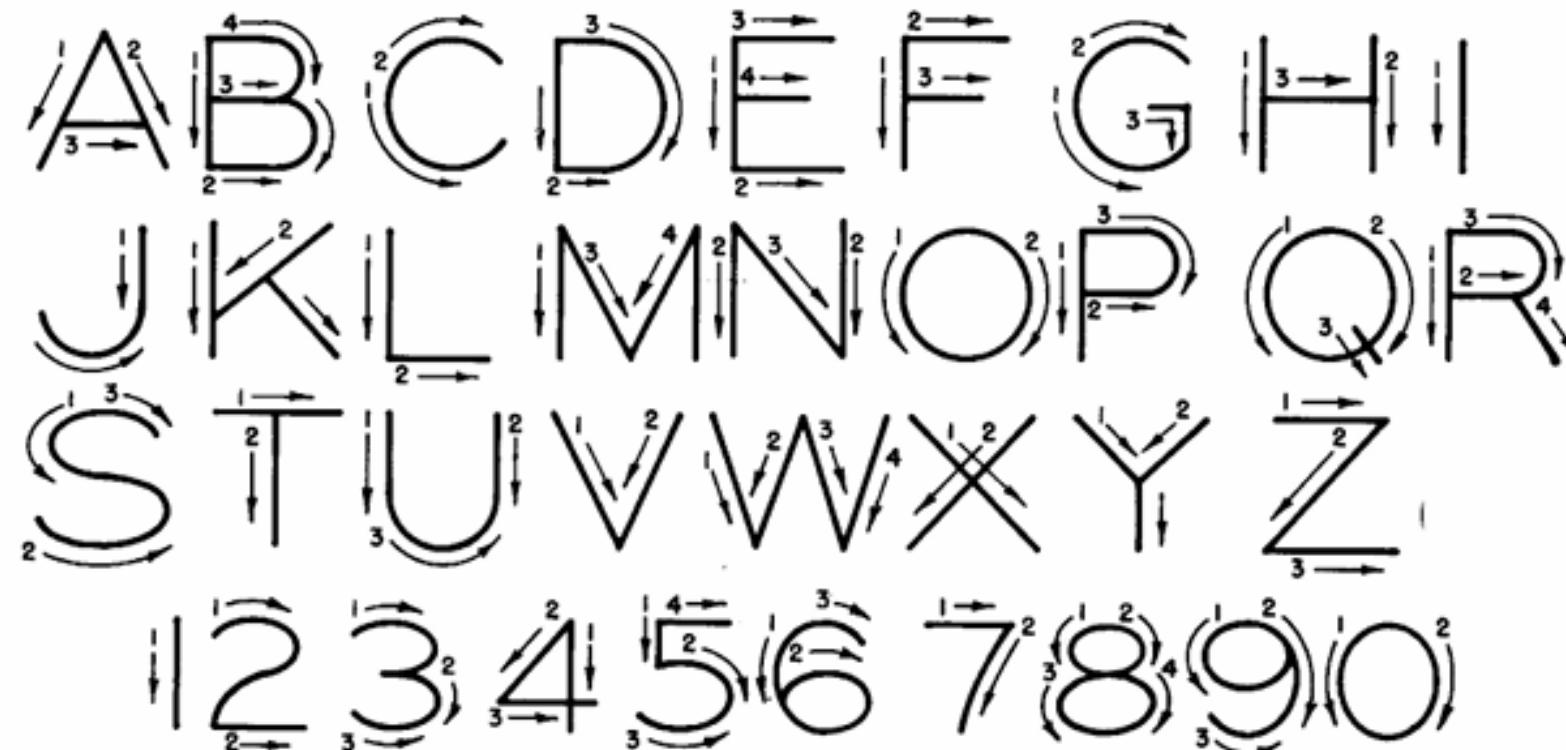
Number 1 is a straight line. The 0, 6, and 9 are elliptical

Guidelines



- All letters and numerals should write in a grid of **6 units height.**
- The width of letters and numerals
 - Letter **I**, or the numeral **1**, has **no** width
 - Letter **W** is **8** units wide
 - **TOM Q VAXY** are **6** units wide
 - **All other** letters and numerals are **5** units wide
 - Spacing of letters should be **2** units

Single Stroke Uppercase Letters



Guidelines for Writing Sentences



- Letters in words are not placed at equal distances from each other; they are placed so that the spaces between letters look **equal**.
- The **distance between words**, called **word spacing**, should be equal.