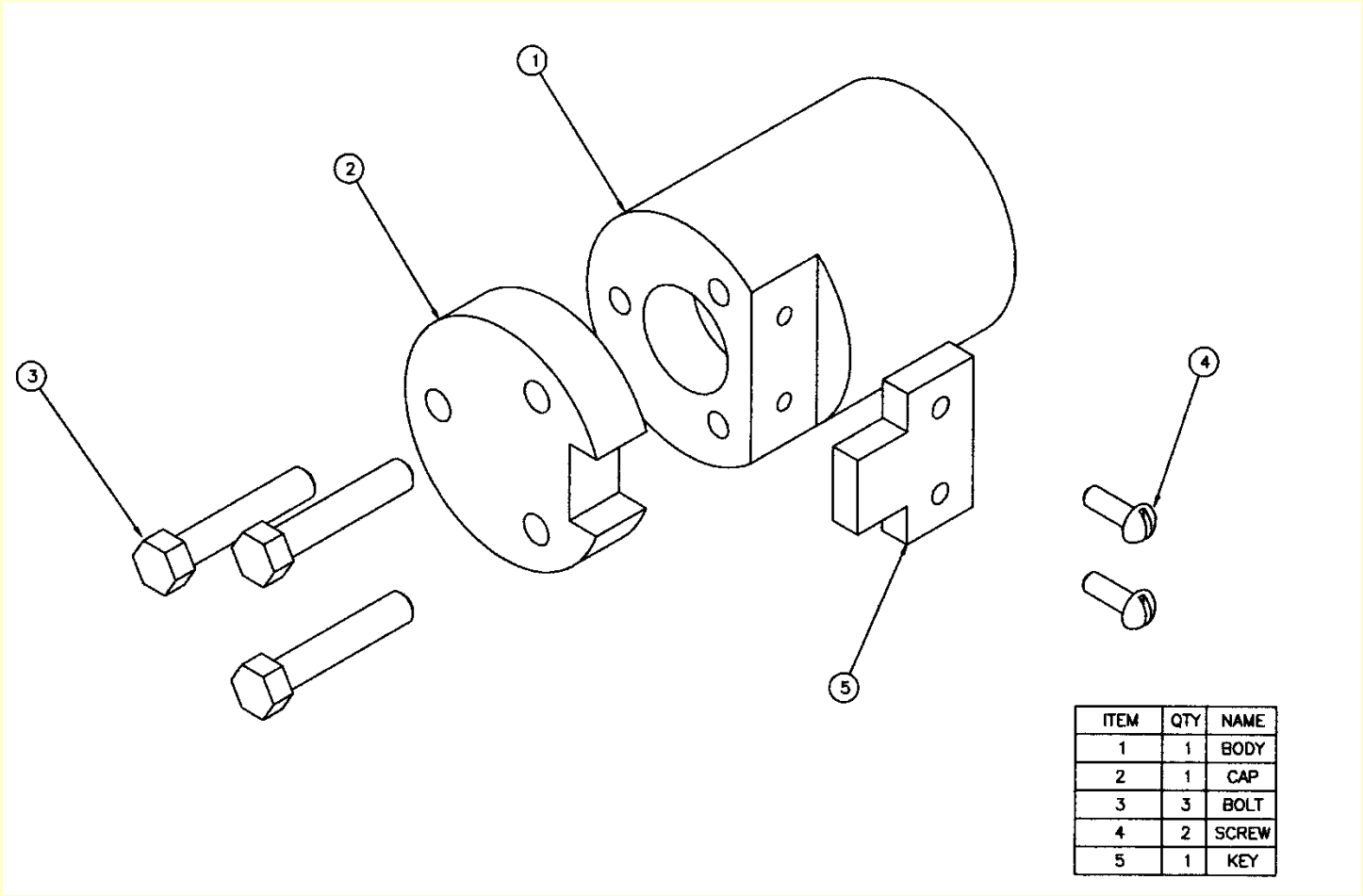
Sketching Isometric Pictorials

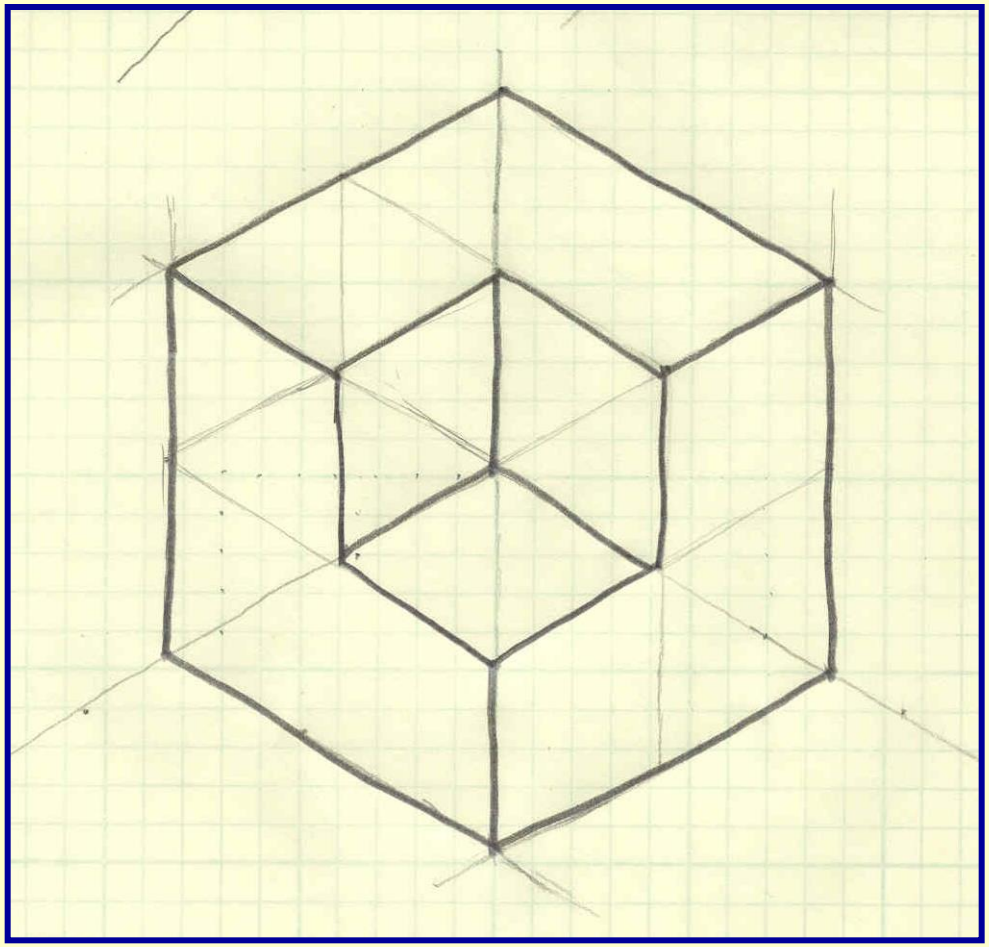
- **Axes for Isometric Pictorials**
- **Producing Isometric Pictorials**
- **Isometric Ellipses and Cylinders**

Isometric Exploded Assembly



ITEM	QTY	NAME
1	1	BODY
2	1	CAP
3	3	BOLT
4	2	SCREW
5	1	KEY

Isometric Pictorial Characteristics?



Axes

Containment Block

Construction Lines

Visible Lines

Parallels

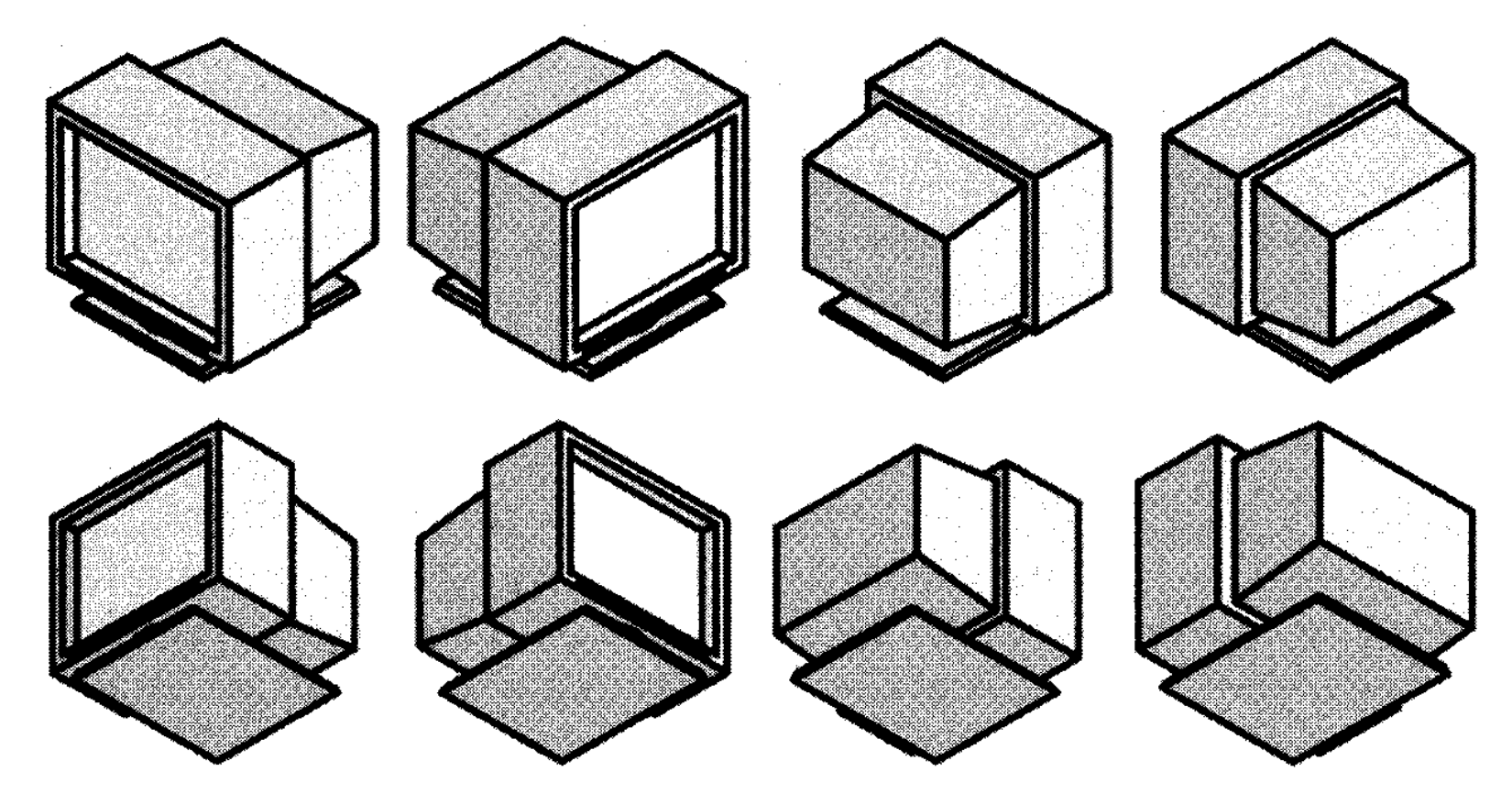
No True Shape

Proportions

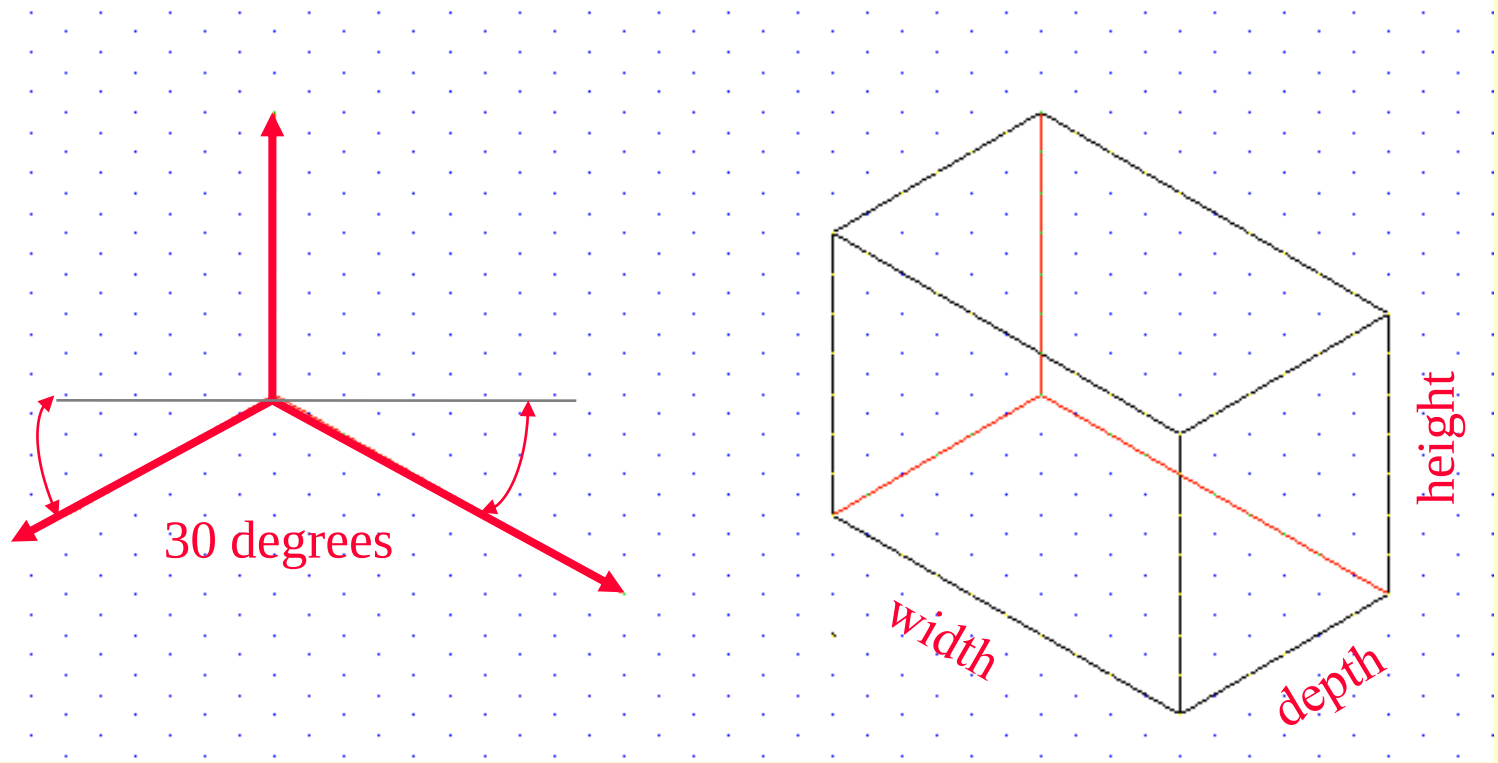
Back Side

Isometric Pictorials present a more realistic representation of 3D objects than oblique pictorials.

Isometric Views



Isometric Axes

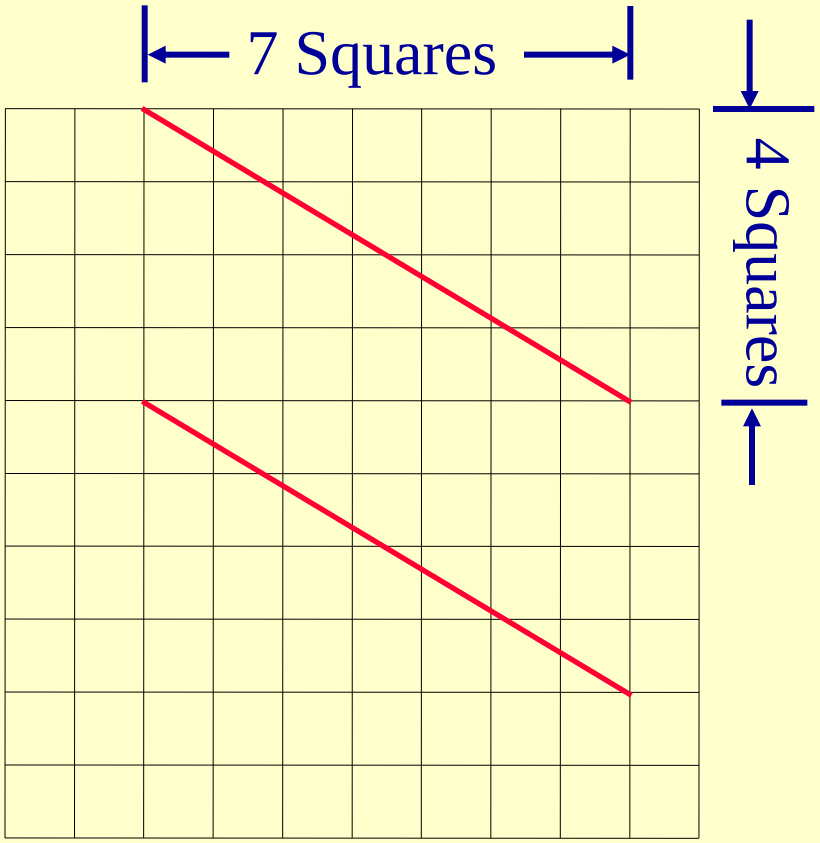


Principal planes are not parallel to the sketch plane.

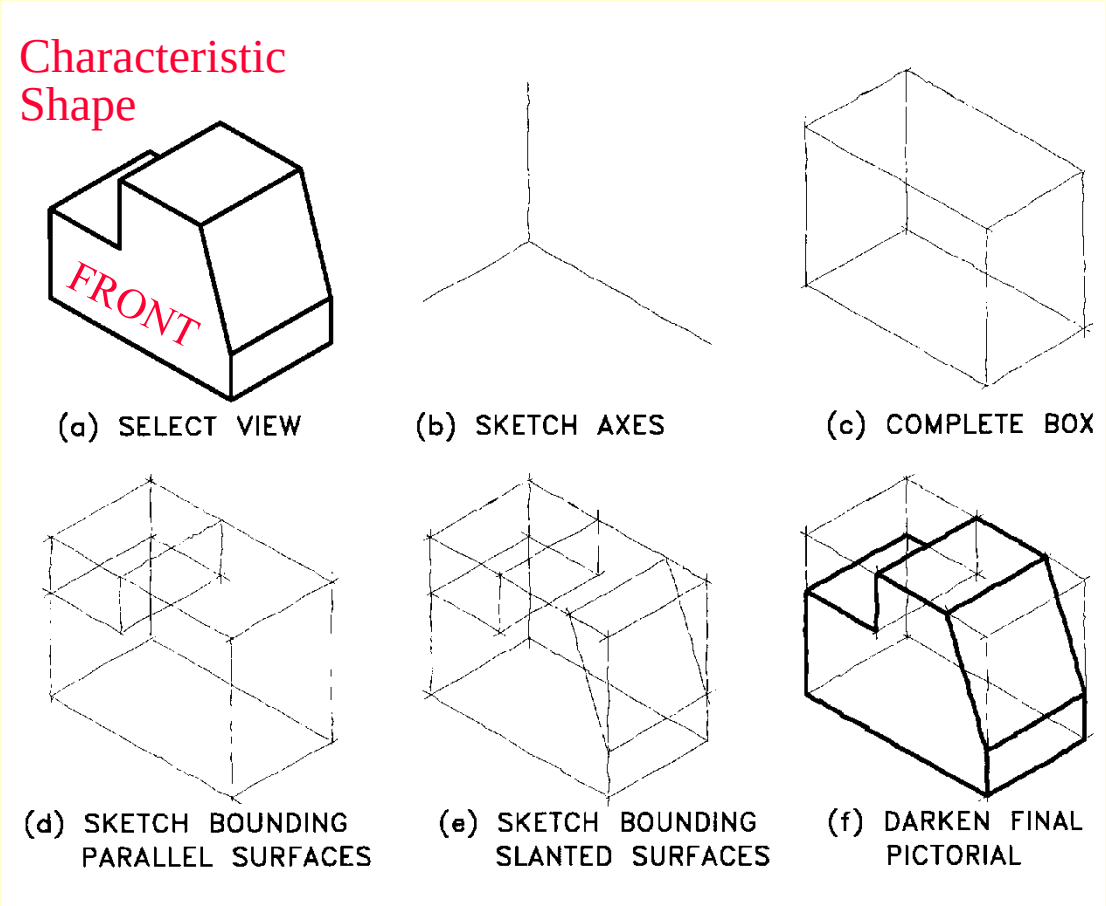
7 by 4 Rule
for Sketching Isometric Pictorials

Keeps Lines Parallel at Approx. 30 Degrees

$\tan^{-1}(4/7) = ?$



Steps to Produce Isometric Pictorials

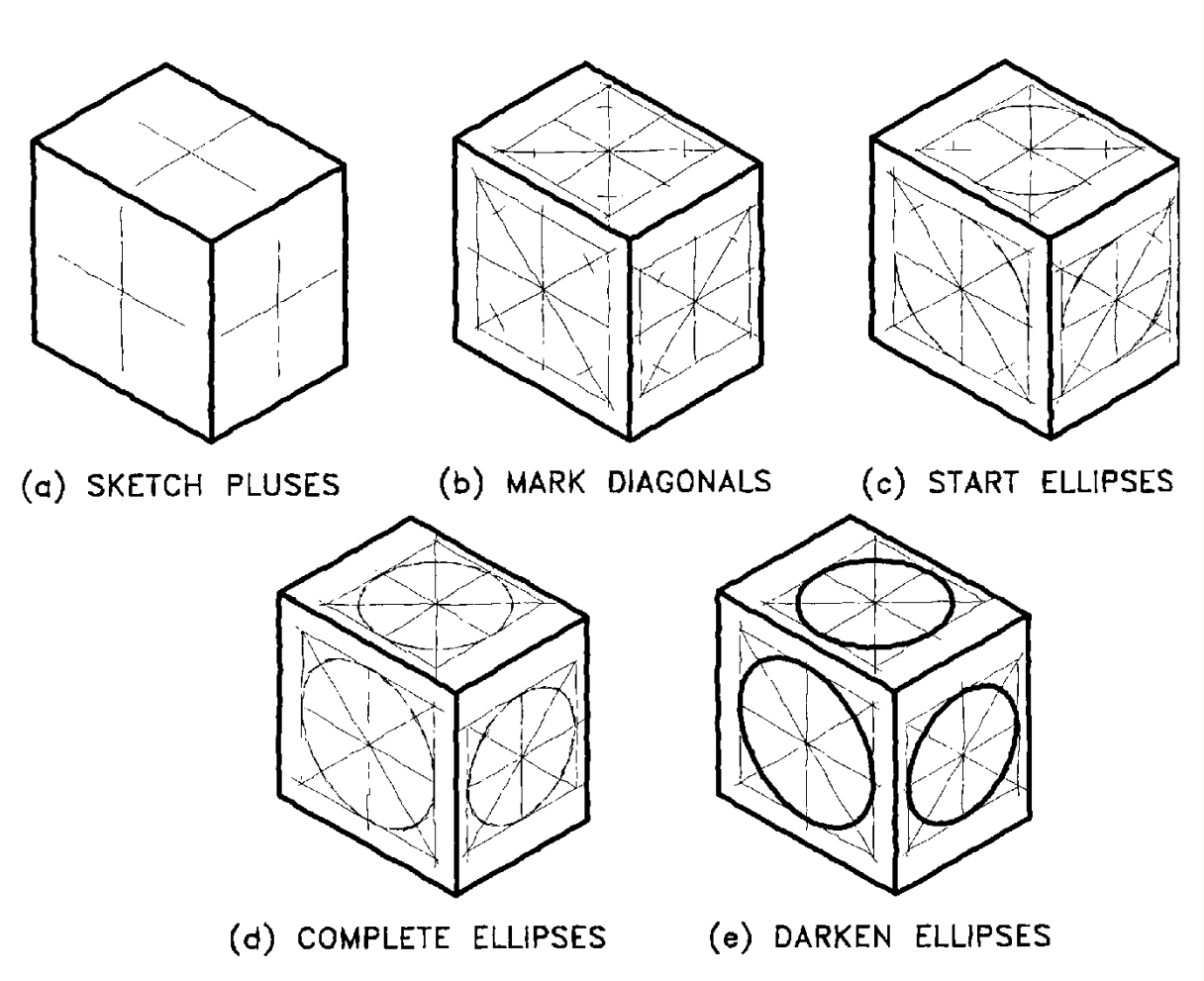


Scale

Transfer units

Parallel Lines → **remain parallel**

Isometric Ellipses



Isometric Cylinders and Holes