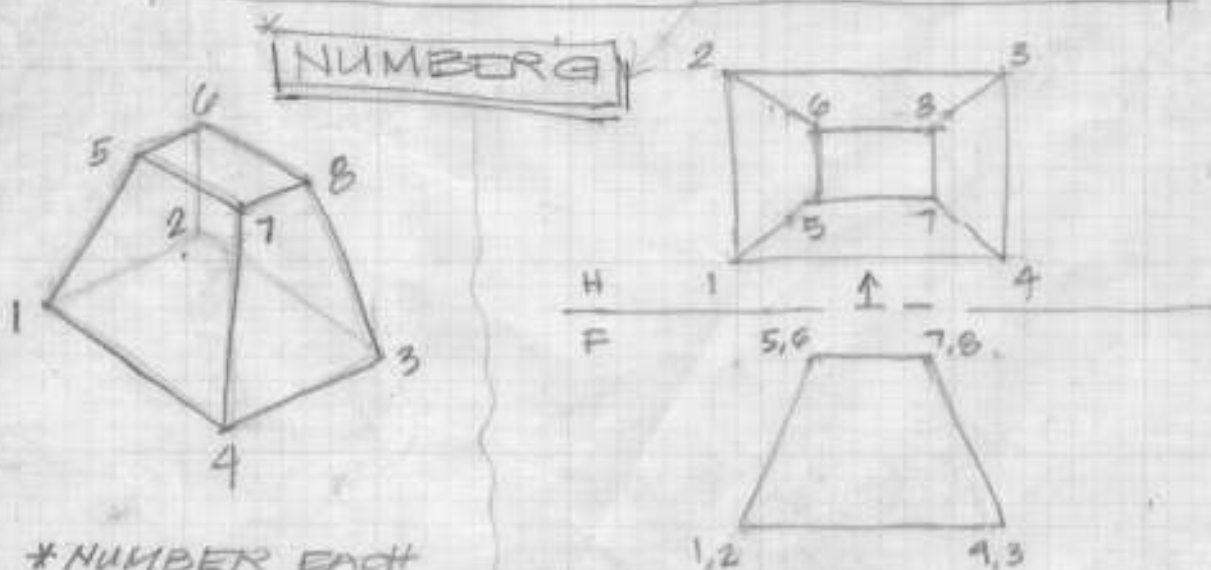


## AUXILIARY VIEWS

- PRINCIPLE VIEWS - HORIZ., FRONTAL, PROFILE
- AUXILIARY VIEW - VIEWS PROJECTED ON ANY PROJECTION <sup>PLANE</sup> OTHER THAN THE PRINCIPLE PLANES.
- PRIMARY AUXILIARY VIEWS - FOUND BY PROJECTING ONTO A PLANE THAT IS ADJACENT AND THIS PERPENDICULAR TO ONE OF THE PRINCIPLE VIEWS
- SECONDARY AUXILIARY VIEWS - FOUND BY PROJECTING ONTO A PLANE THAT IS ADJACENT AND THIS PERPENDICULAR TO A PRIMARY AUXILIARY VIEW.

## PRIMARY AUXILIARY VIEWS



\* NUMBER EACH POINT/CORNER

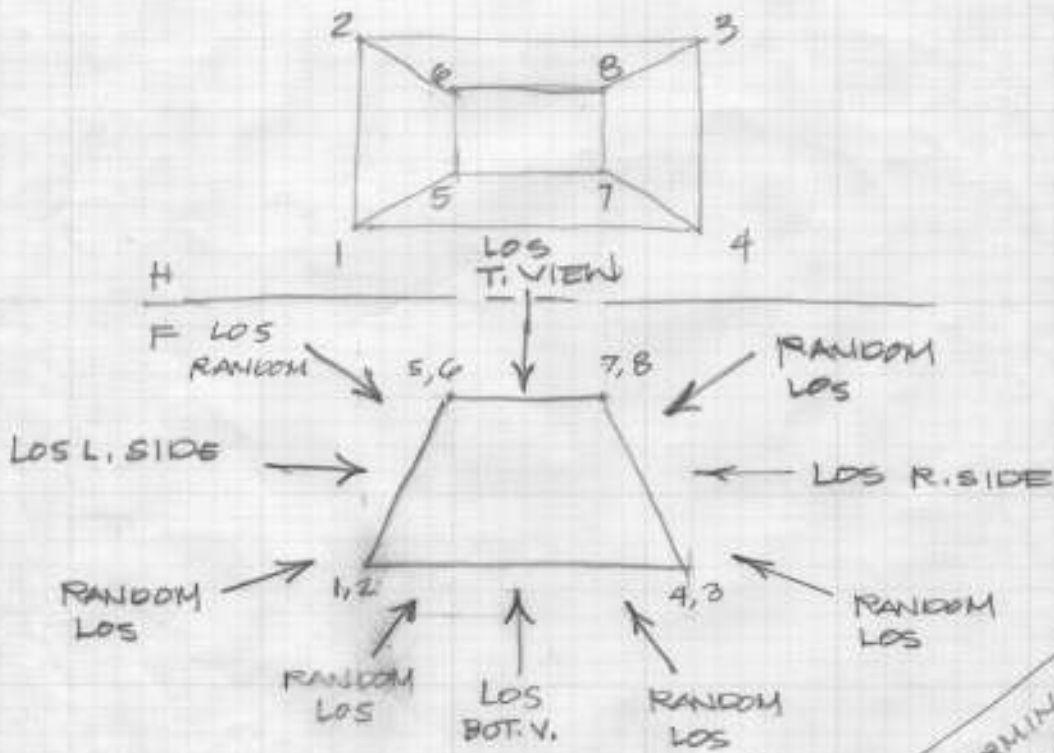
\* ALWAYS NUMBER EACH FOLD.

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## PRIMARY AUXILIARY VIEWS

- LINE OF SITE (LOS) • IMPORTANT BECAUSE THE REST OF THE STEPS ARE BASED ON THIS STEP.
- AN IMAGINARY LINE FROM THE EYE TO A PERCEIVED OBJECT.



90°  
 F  
 I  
 • ONCE "LOS" IS DETERMINED;  
 A REFERENCE LINE MUST  
 BE DRAWN PERPENDICULAR  
 TO THE "LOS".

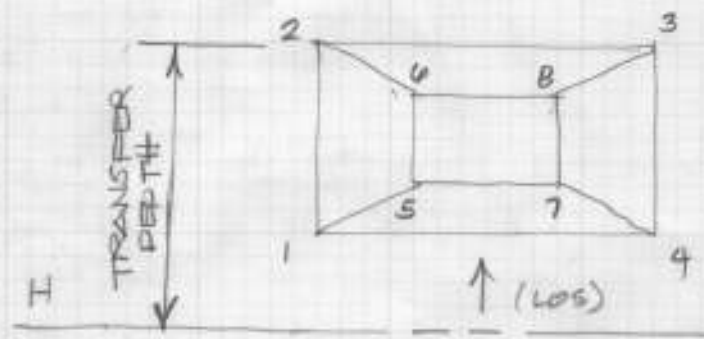
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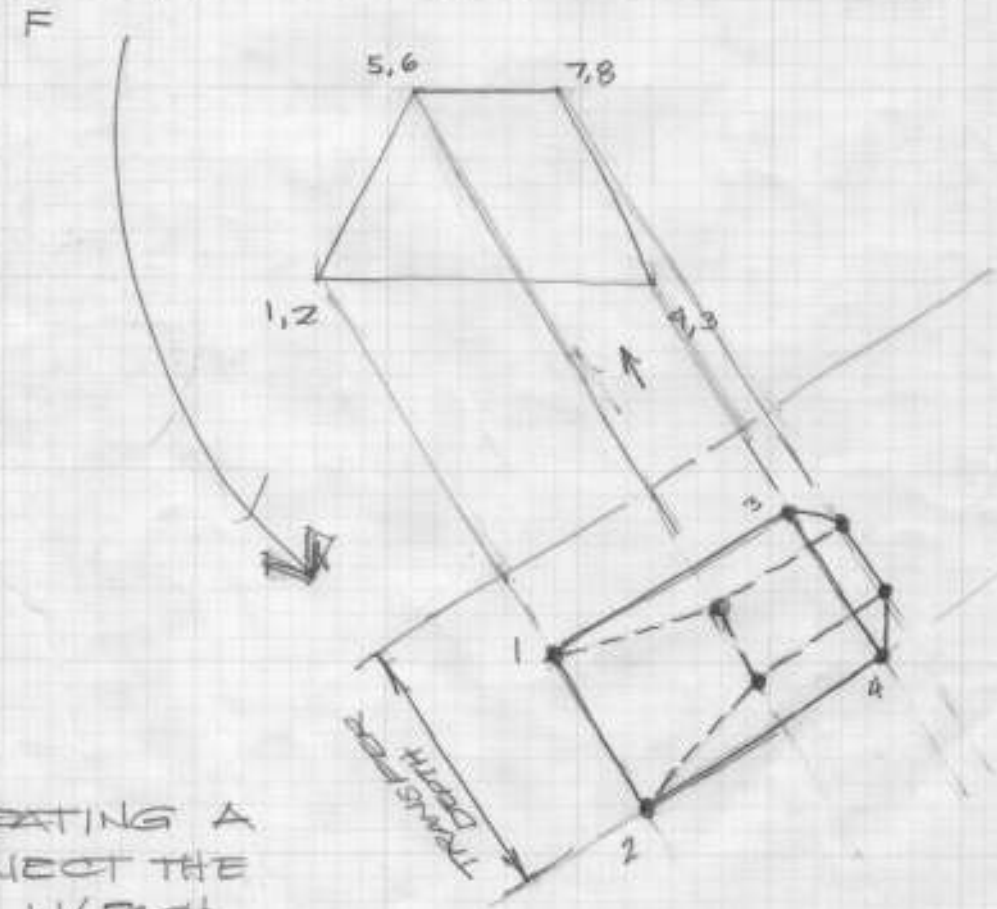
TRANSFER DISTANCE

- ◆ USE DIVIDERS
- ◆ OR PAPER SCALE, OPTIONAL

EXAMPLE: 1



ALWAYS GO  
 2-VIEWS BACK FOR  
 TRANSFERRING  
 DISTANCES.



\* CREATING A  
 CONNECT THE  
 DOTS W/ EACH  
 NEW POINT.

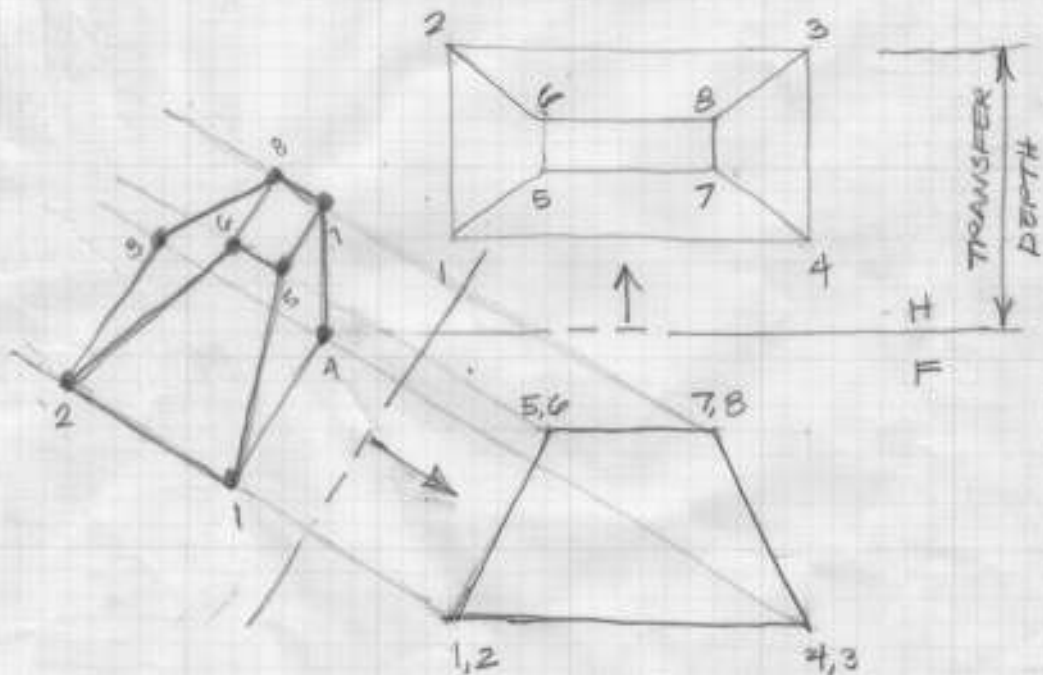
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### PRIMARY AUXILIARY VIEWS

- SEQUENCE
- 1) NUMBER POINTS
  - 2) DETERMINE "LINE OF SITE" (LOS)
  - 3) DRAW "REFERENCE LINE" - (PERPENDICULAR TO THE 'LOS')
  - 4) DRAW "PROJECTION LINES" - (PARALLEL TO 'LOS')
  - 5) TRANSFER "POINTS OF MEASUREMENT" - • USE DIVIDERS OR  
(2 VIEWS BACK) • PAPER SCALE
  - 6) CONNECT THE POINTS

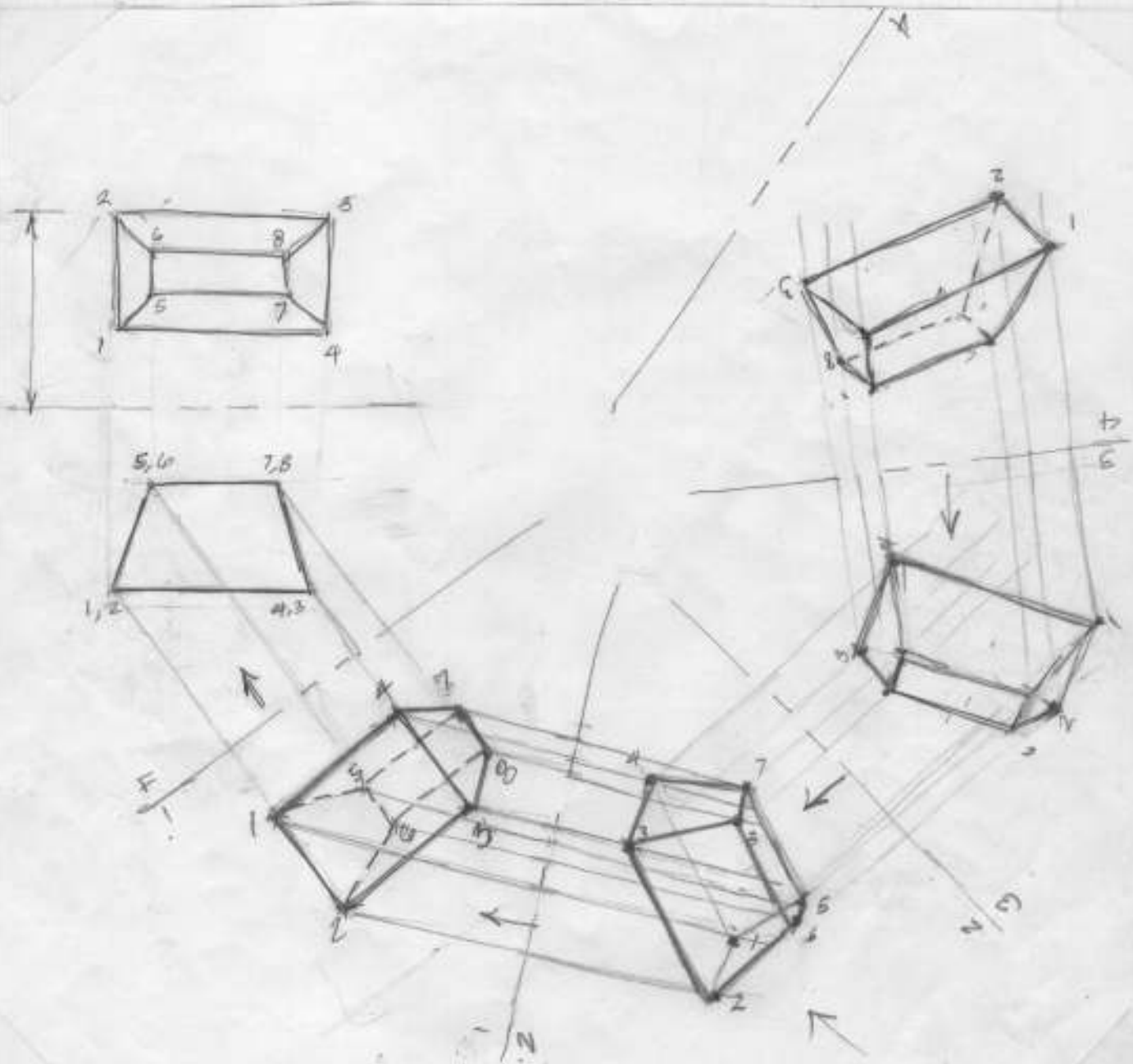
### EXAMPLE : 2



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# SECONDARY AUXILIARY VIEWS



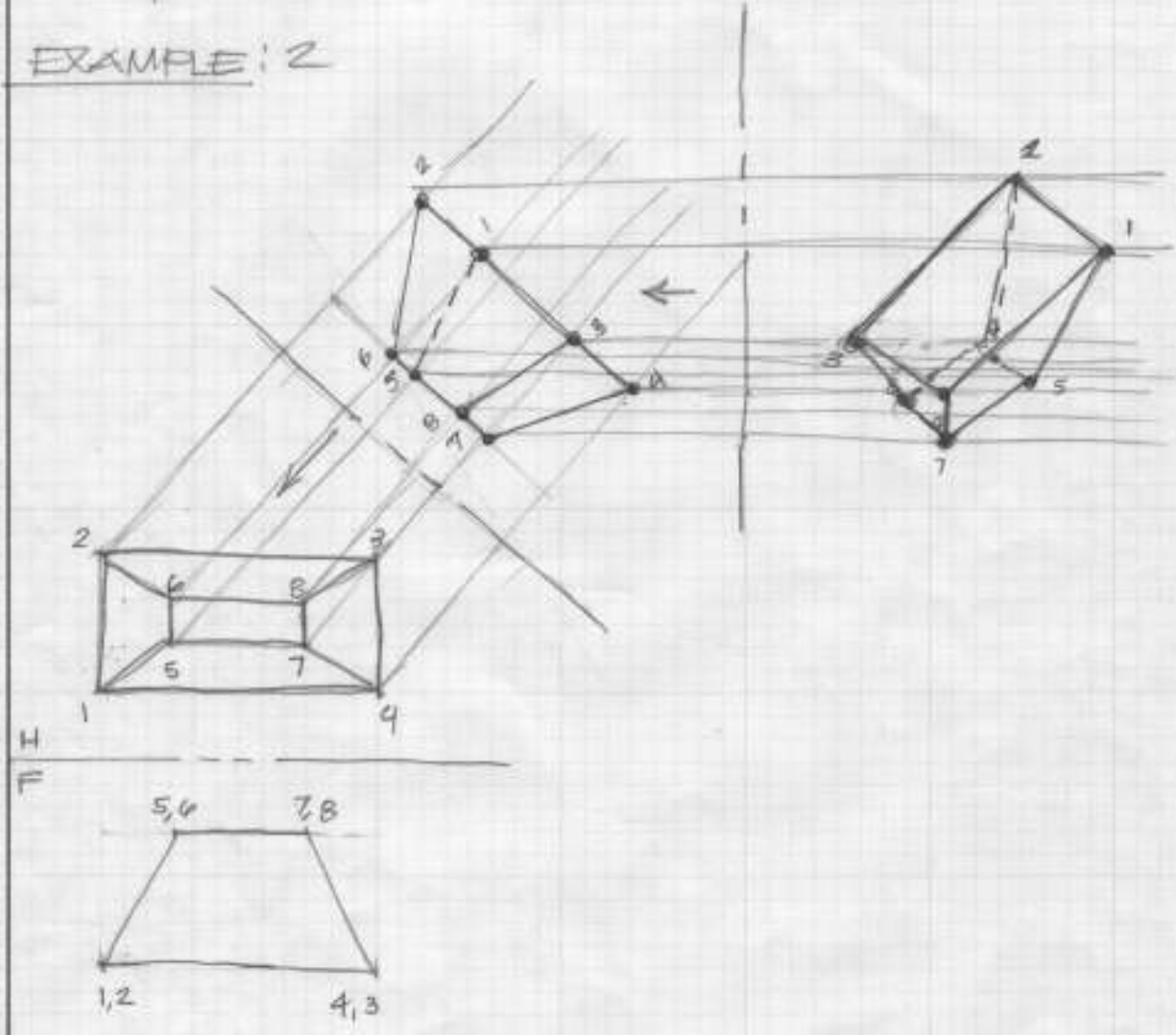


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# SECONDARY AUXILIARY VIEWS

EXAMPLE: 2



# | FUNDAMENTAL VIEWS |

## \*(4) FUNDAMENTAL VIEWS:

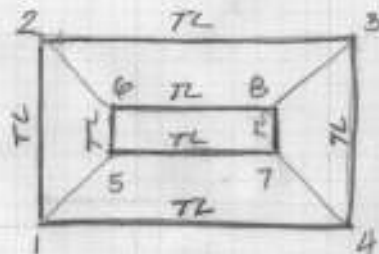
- 1) THE TRUE LENGTH (TL) OF A STRAIGHT LINE.
- 2) THE POINT VIEW OF A LINE. (PV)
- 3) THE EDGE VIEW (EV) OF A PLANE
- 4) A PLANE IN ITS TRUE SIZE (TS) AND SHAPE.

### A) LOCATE TRUE LENGTH LINE.

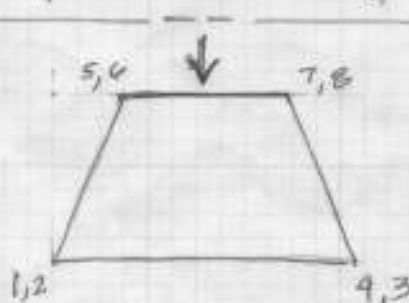
- 1) IS THE TRUE LENGTH LINE IN ONE OF THE PRINCIPAL VIEWS.

a) IF THE LINE OF SIGHT IS PERPENDICULAR TO THE OBJECT LINE IN ONE VIEW, IT WILL APPEAR TRUE LENGTH IN THE ADJACENT VIEW AND CAN BE MEASURED.

EX. EXAMPLE:



AND PARALLEL TO THE OBJECT LINE IN THE ADJACENT VIEW.



# FUNDAMENTAL VIEWS

## TRUE LENGTH (TL)

• IF THE "LOS" IS PERP. TO THE OBJECT LINE IN ONE VIEW, IT WILL BE "TL" IN THE ADJACENT VIEW.  
(OR)

• IF THE FOLD-LINE IS PARALLEL TO THE OBJECT LINE IN ONE VIEW, IT WILL BE "TL" IN THE ADJACENT VIEW.

## POINT VIEW (PV)

• TO CREATE A "PV", THE "LOS" MUST PARALLEL TO THE "TL" LINE.

(OR) • A LINE MUST "TL" IN ONE VIEW, IN ORDER FOR IT TO BE A "PV" IN THE ADJACENT VIEW.

## EDGE VIEW (EV)

• AN "EV" IS FOUND IN ANY VIEW WHERE A "TL" LINE IN THE PLANE IS SHOWN AS A "PV".

## TRUE SHAPE (TS)

• THE "LOS" MUST BE DRAWN PERP. TO EV.  
(OR)

• IF THE FOLD-LINE IS PARALLEL TO EV. IN ONE VIEW; IT WILL BE "TS" IN THE ADJACENT VIEW.



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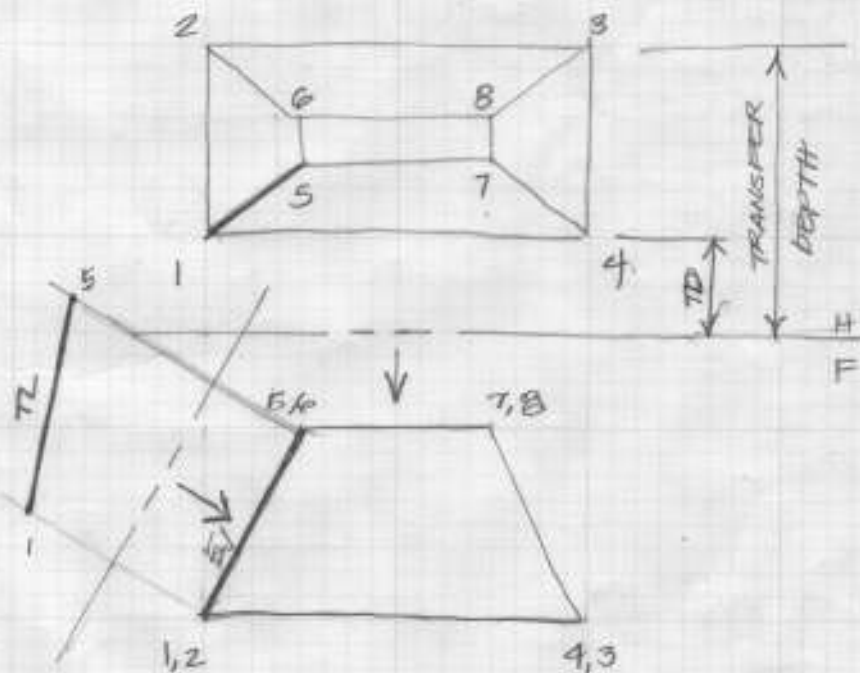
JOB CHAPTER 3  
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CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_  
SCALE \_\_\_\_\_

A) LOCATE THE TRUE LENGTH LINE.

2) IF THE PREVIOUS RULE DOES NOT APPLY, IT IS AN OBLIQUE LINE AND CANNOT BE MEASURED IN A PRINCIPLE VIEW.

a) DRAW A PRIMARY AUXILIARY VIEW TO FIND THE TRUE LENGTH.

\* DRAW THE LINE OF SIGHT PERPENDICULAR TO THE OBLIQUE LINE IN EITHER PRINCIPLE VIEW.



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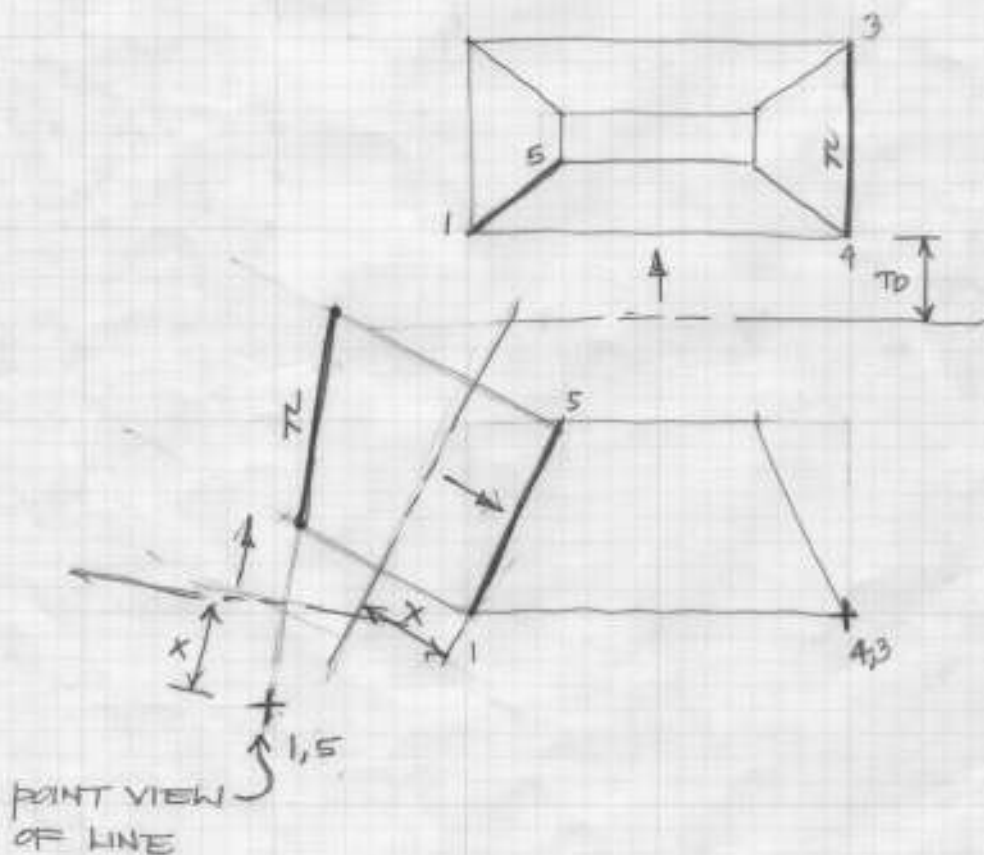
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

SCALE \_\_\_\_\_

B) DRAW THE POINT VIEW OF A TRUE LENGTH LINE.

- THIS IS USED TO FIND THE SHORTEST DISTANCES BETWEEN A KNOWN POINT AND A LINE, PARALLEL LINES, SKEWED LINES, ETC.

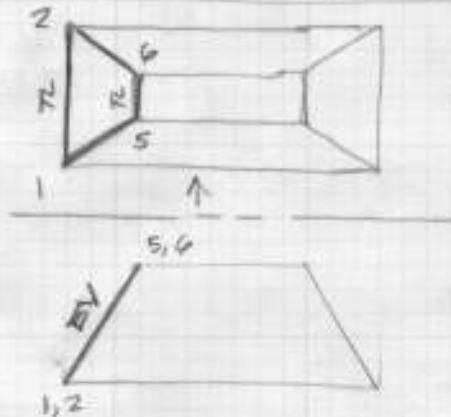
NOTE! THE LINE OF SITE MUST BE DRAWN PARALLEL TO THE TRUE LENGTH LINE.



**C) DRAW AN EDGE VIEW OF A PLANE.**

• THIS IS USED TO FIND THE SHORTEST DISTANCE BETWEEN A KNOWN POINT AND A PLANE.

\* AN EDGE VIEW IS FOUND IN ANY VIEW WHERE A LINE IN THE PLANE APPEARS AS A POINT.

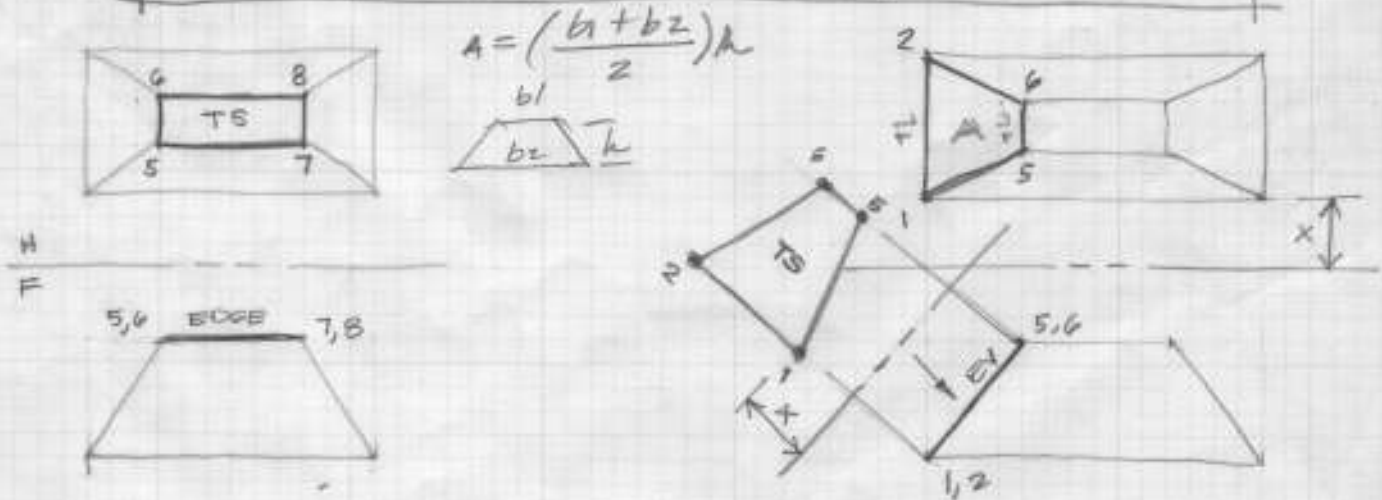


\* LINE OF SIGHT IS PARALLEL TO A TRUE LENGTH LINE.

**D) DRAW THE TRUE SHAPE OF A PLANE.**

• THIS IS USED TO FIND A SPECIFIC LOCATION, DIMENSION, AREA, ETC., OF A PLANE.

• THE LINE OF SITE MUST BE DRAWN PERPENDICULAR TO THE EDGE VIEW OF A PLANE.



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LOCATING PRINCIPLE VIEWS OF AN  
OBJECT USING AUXILIARY VIEWS,

