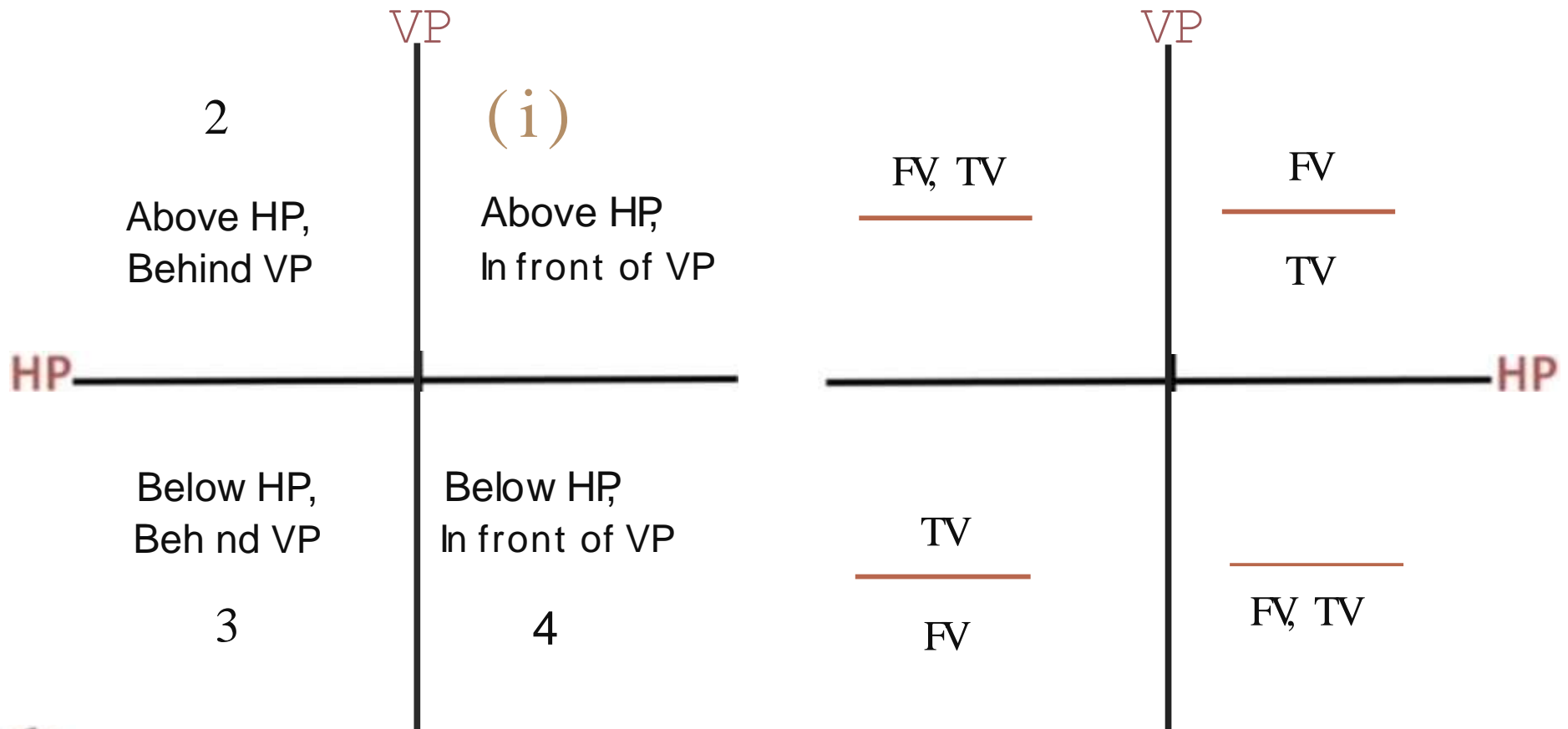


PROJECTION OF POINTS, LINES AND PLANE SURFACES

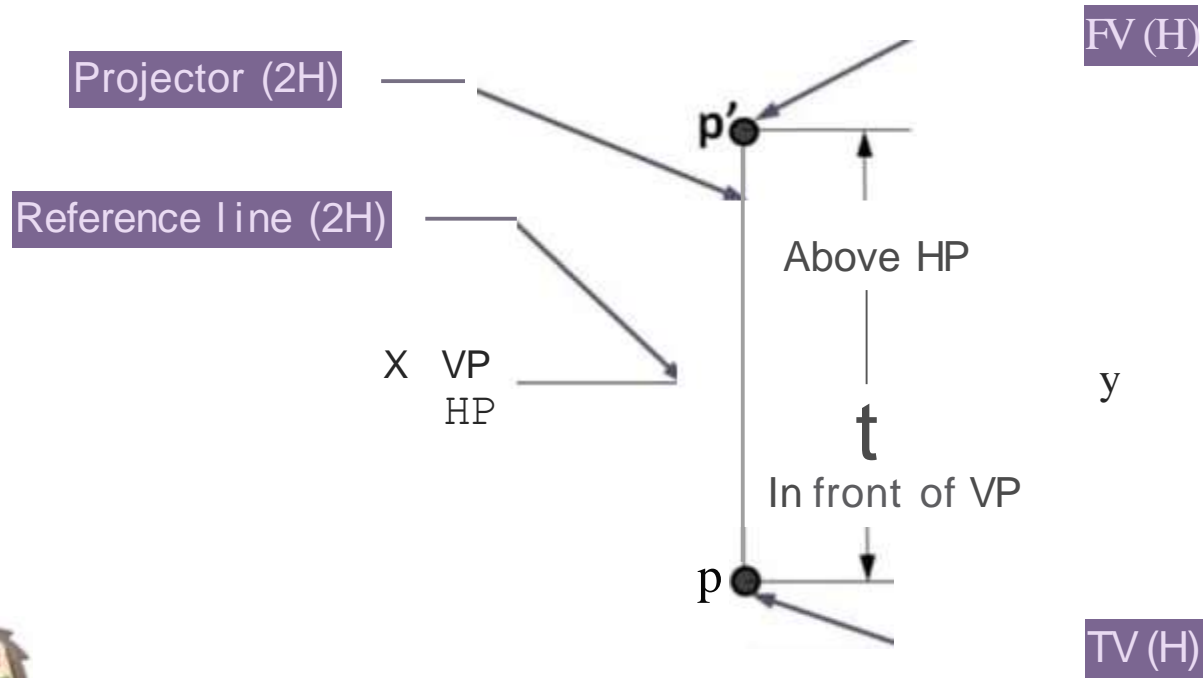


Things to be remembered

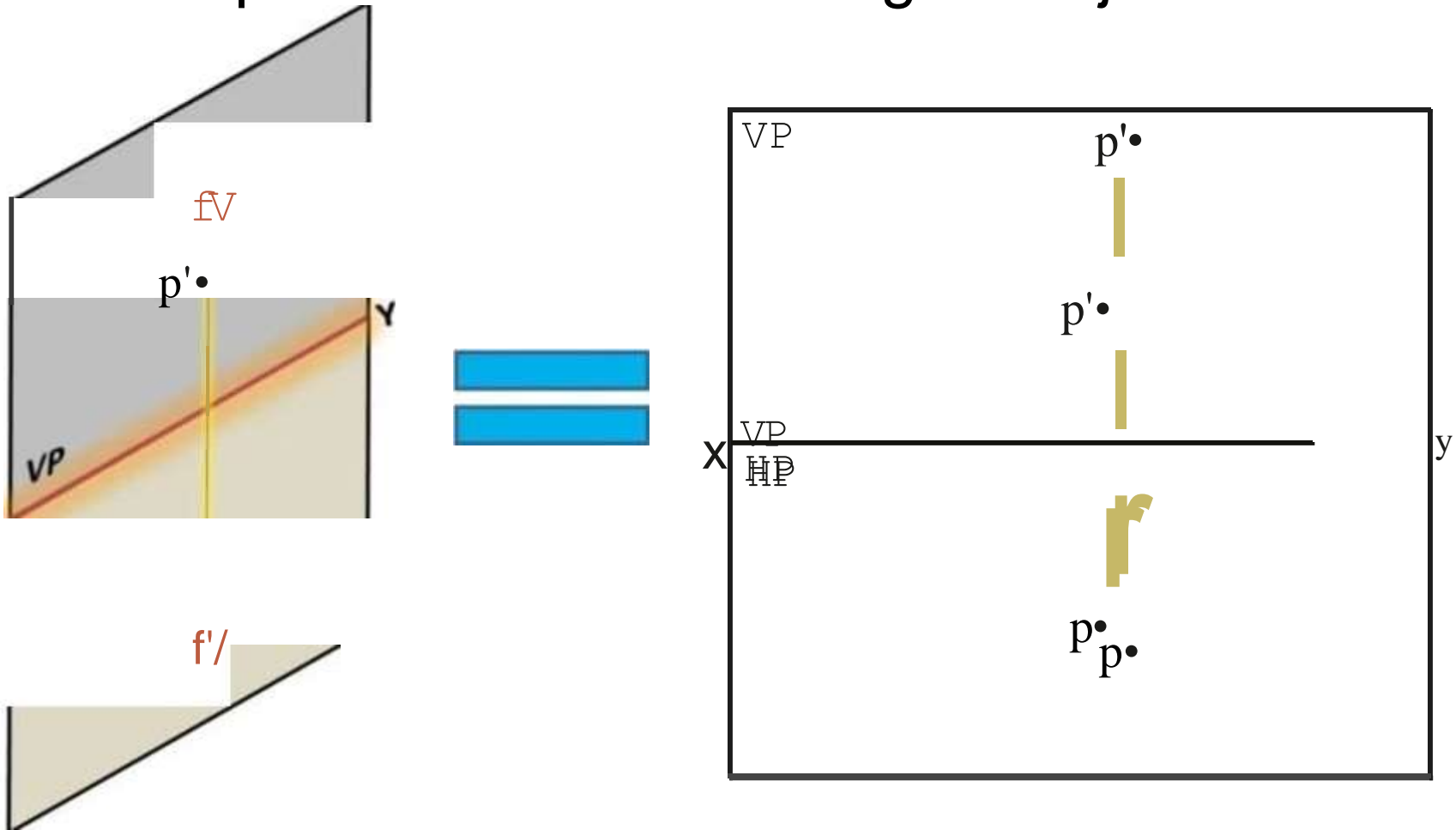
Entity	General Applications	Suitable Pencil
Thick Point	Point	H
Continuous thin line	Reference line (XV), Dimension line, Extension line, Projector	2H
Lettering	Title, Sub-title, Dimension text etc.	HB
Arrow Head	Dimension and Leader lines	HB

Concept Problem in First Angle Projection

Above HP, In front of VP 1st Quadrant $\frac{FV}{TV}$



Concept Problem in First Angle Projection



Concept Problem in First Angle Projection

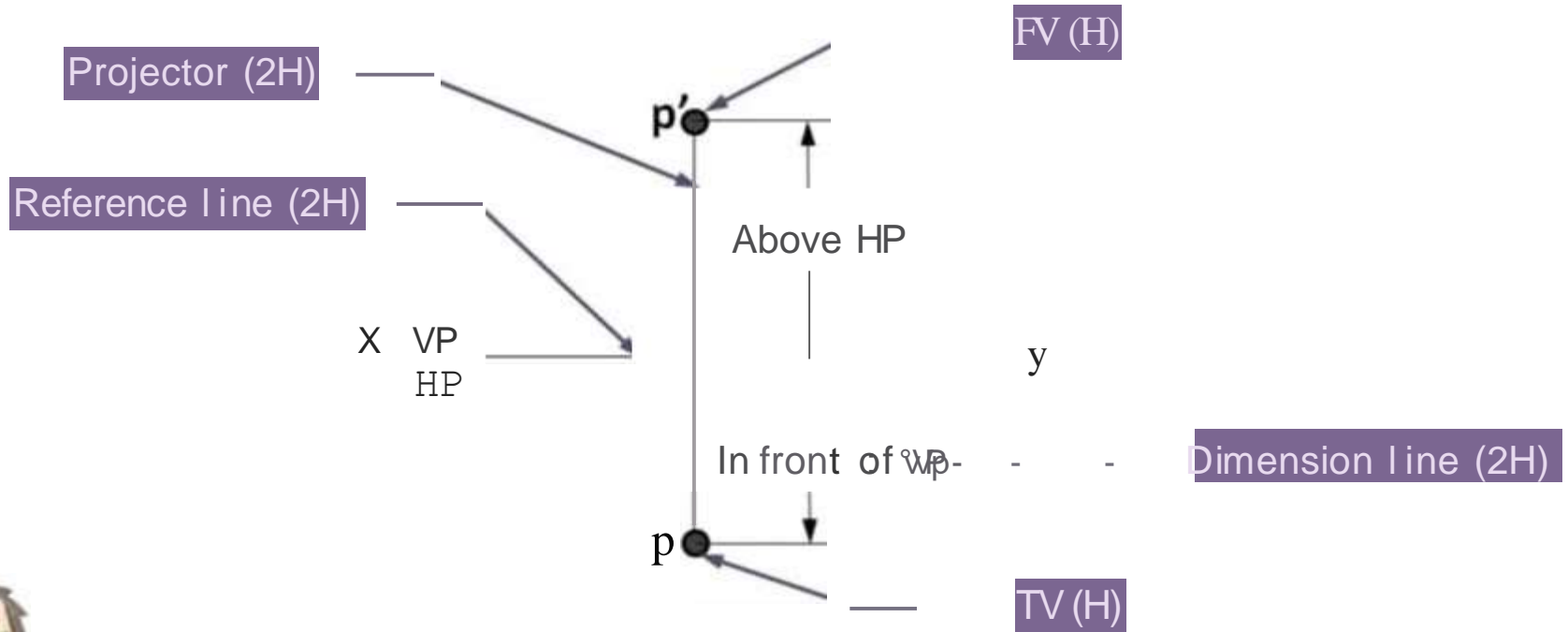
Dimensioning{

Above HP, In front of VP

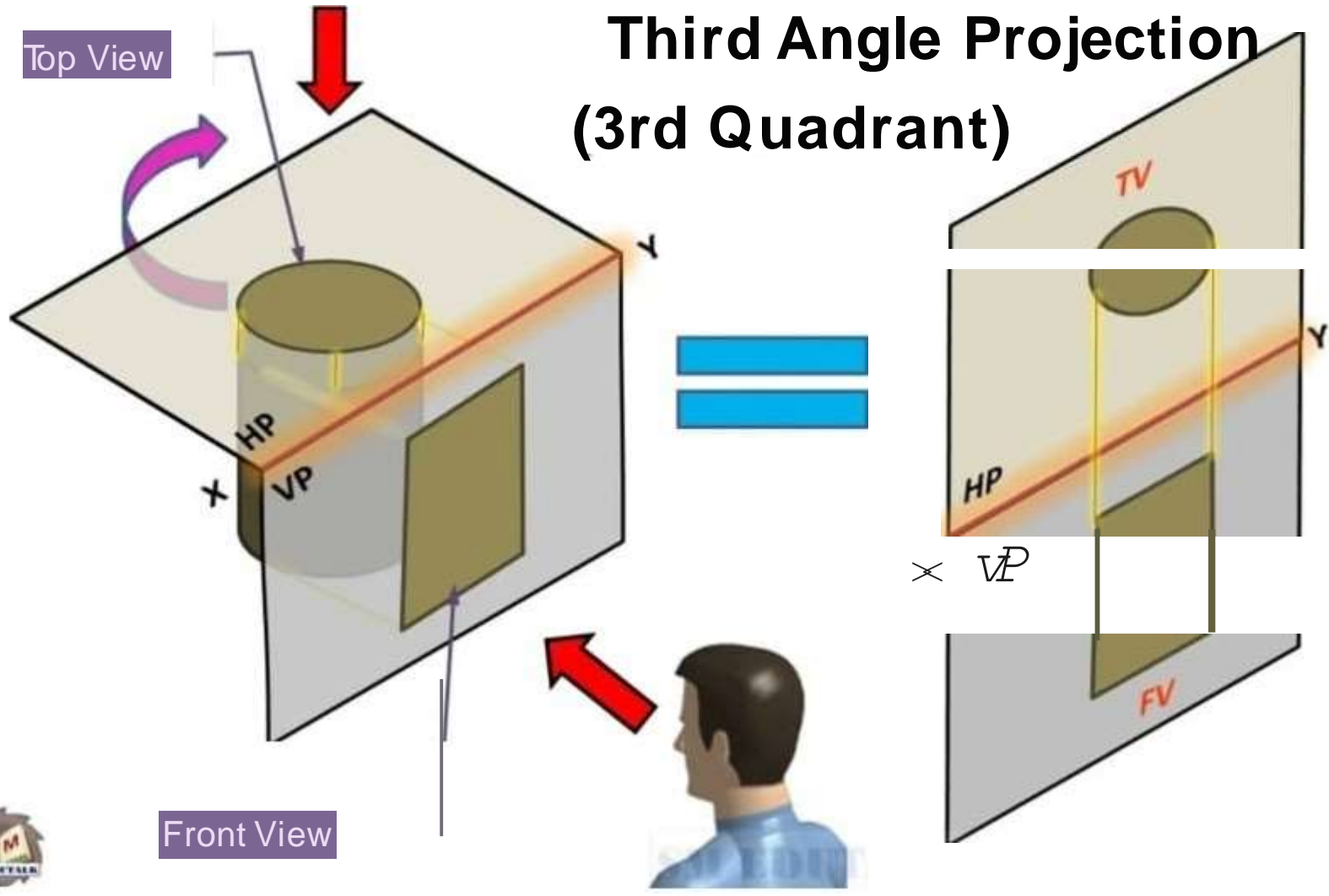
1st Quadrant

EV

TV



Third Angle Projection (3rd Quadrant)



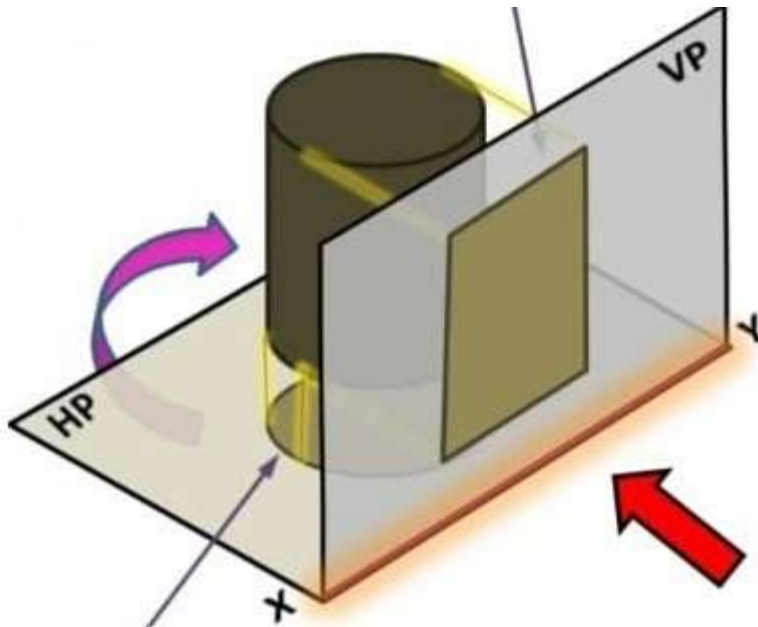
Top View

Front View

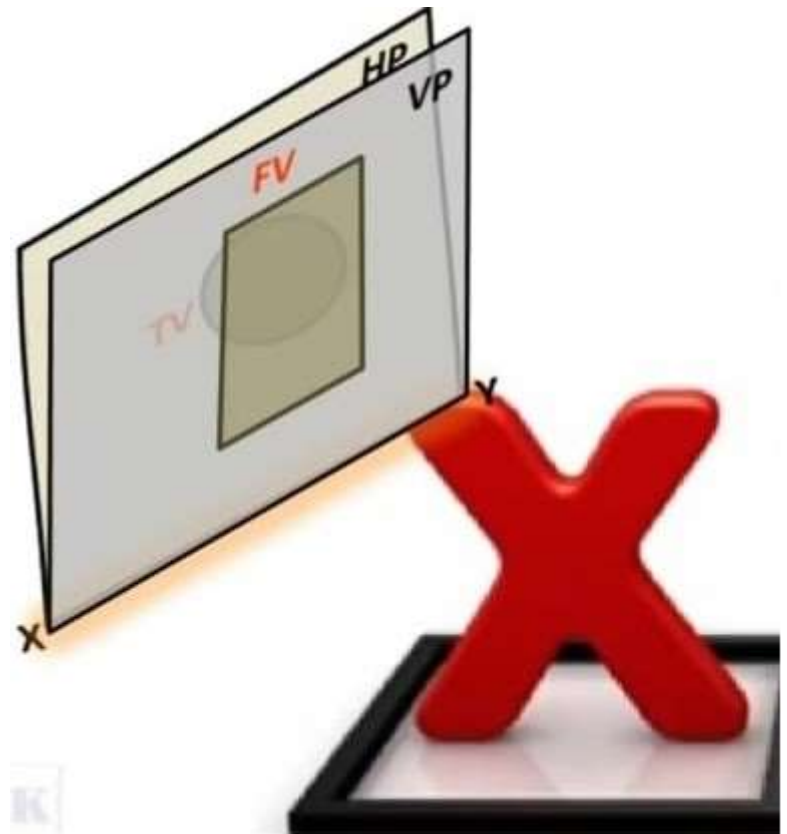


J Second Angle Projection (2nd Quadrant)

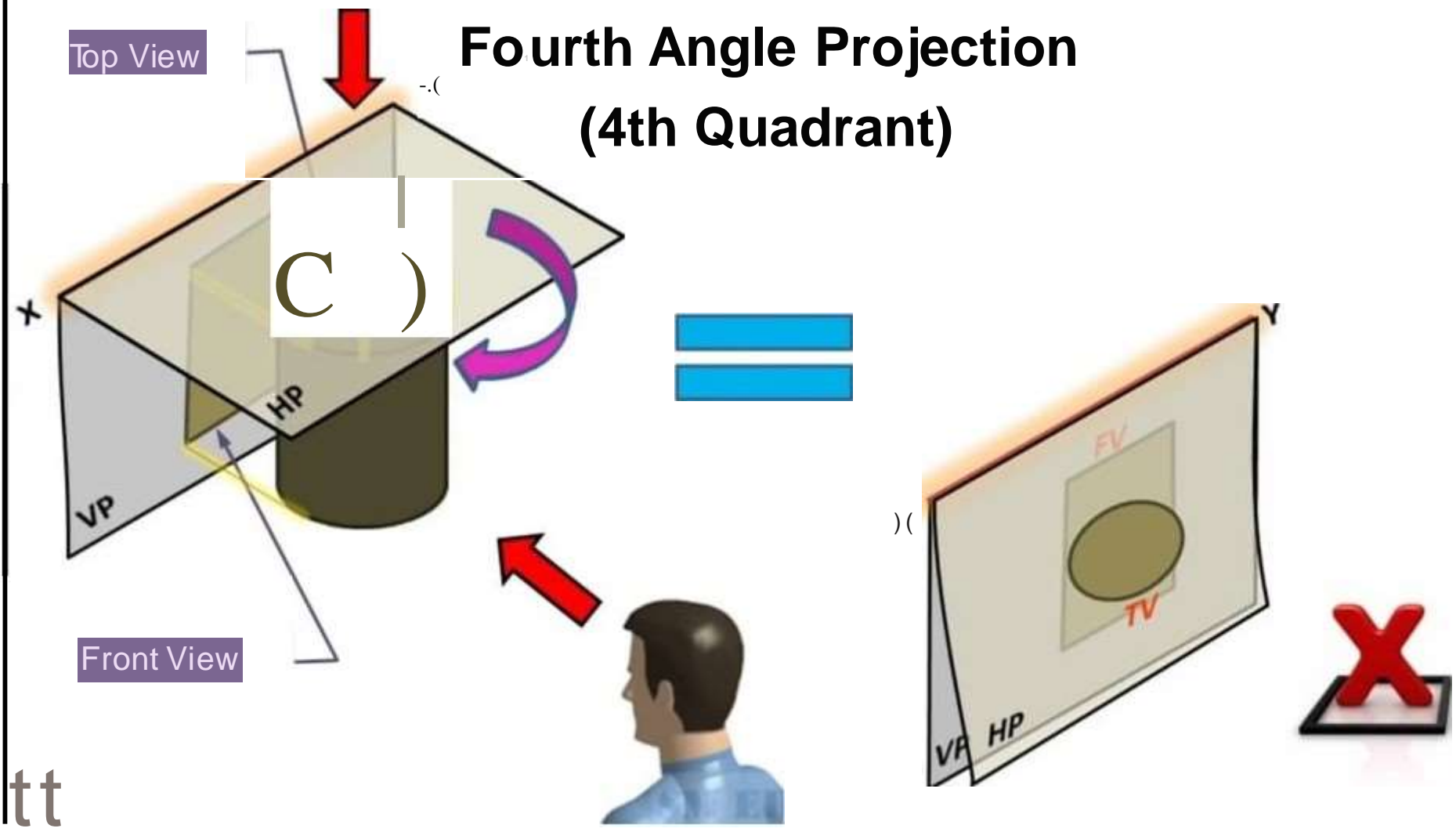
Front view



Top view



Fourth Angle Projection (4th Quadrant)



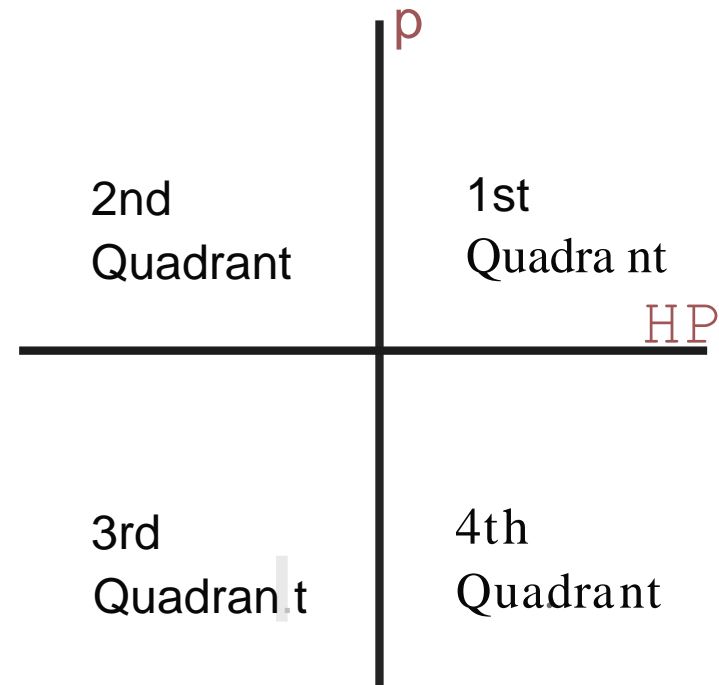
Top View

Front View

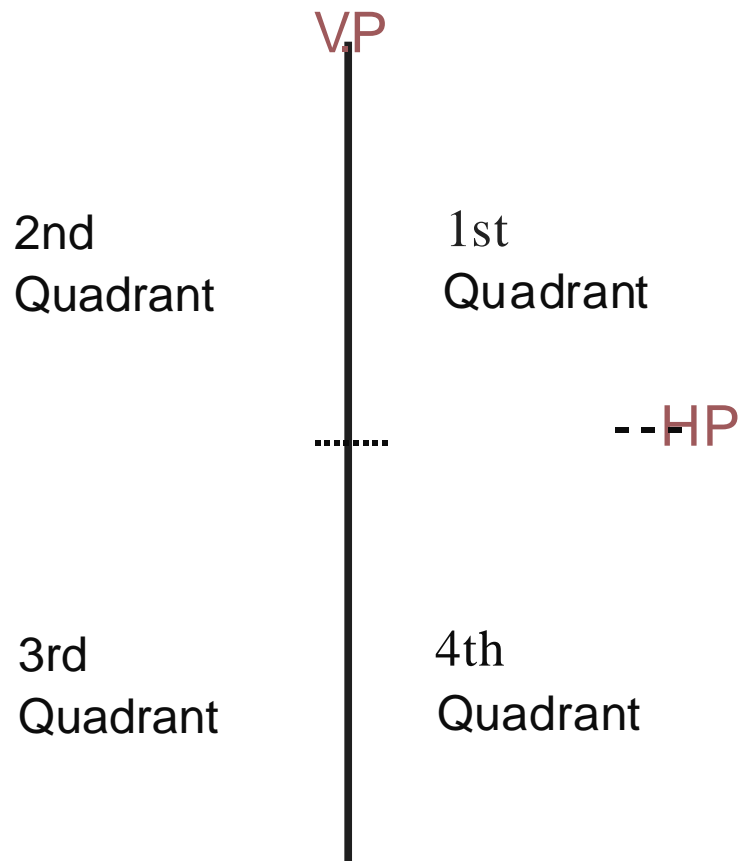
tt

Types of Multi-view Orthographic Projection

- First angle projection
- Second angle projection
- Third angle projection
- Fourth angle projection



Four Quadrants



1st Quadrant

Above HP, In front of VP

2nd Quadrant

Above HP, Behind VP



3rd Quadrant

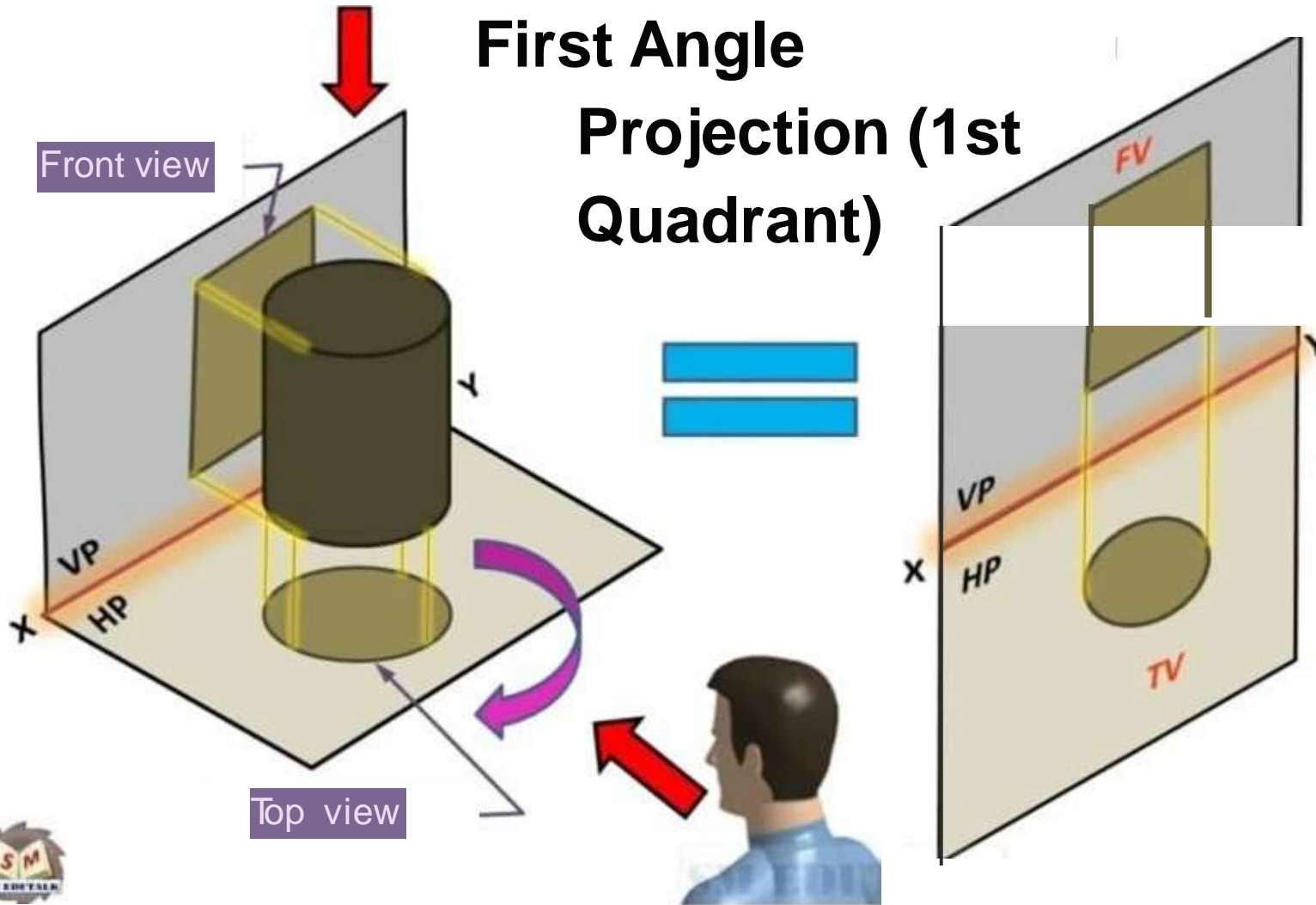
Below HP, Behind VP

4th Quadrant

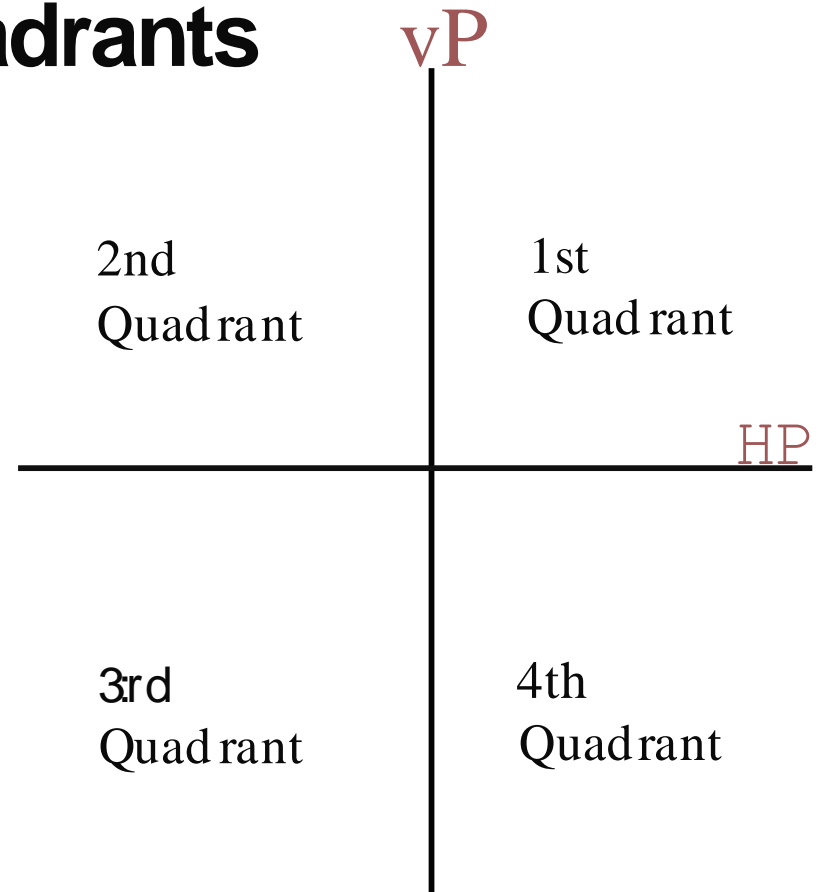
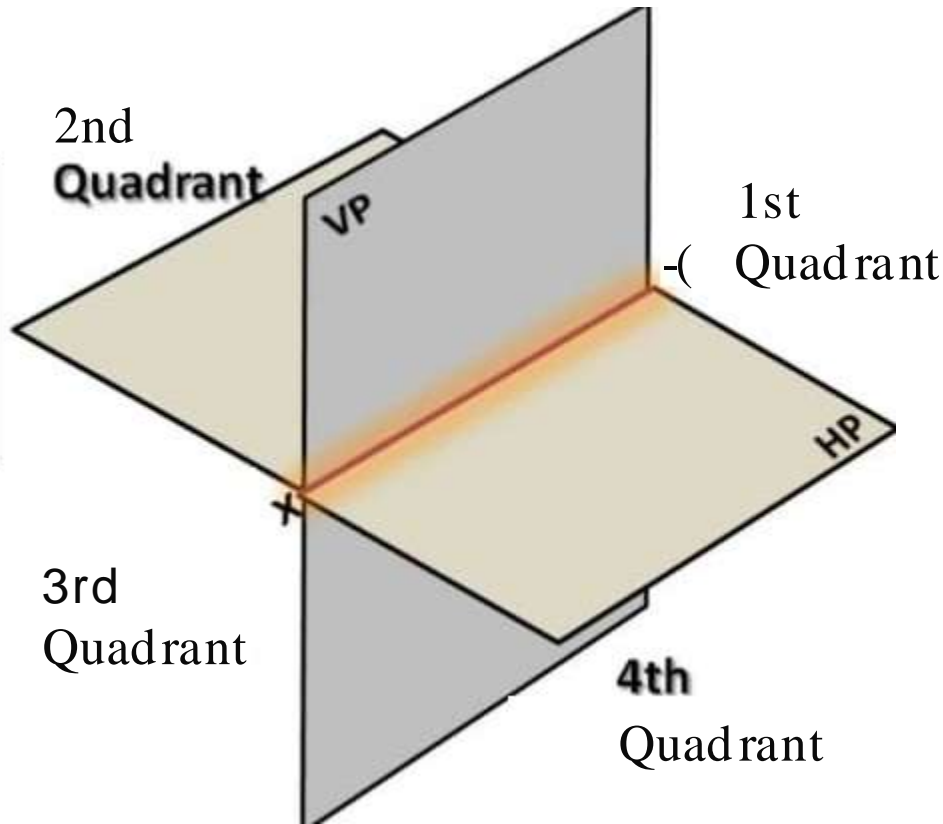
Below HP, In front of VP

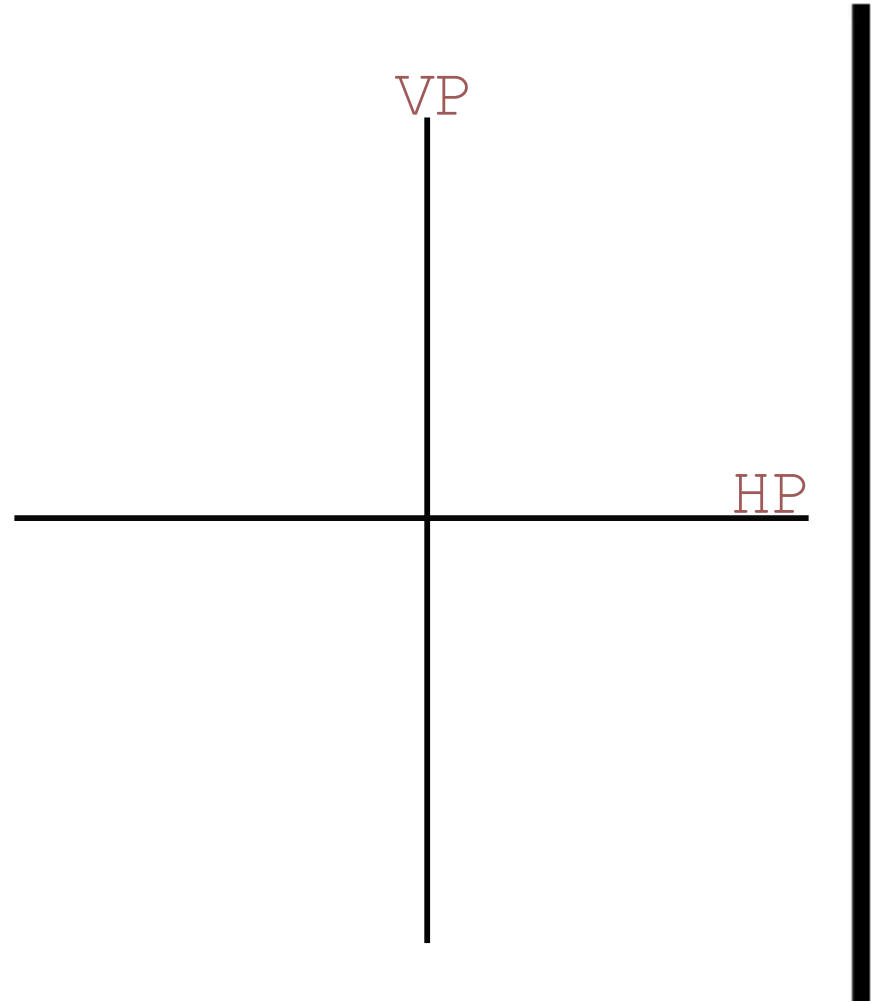
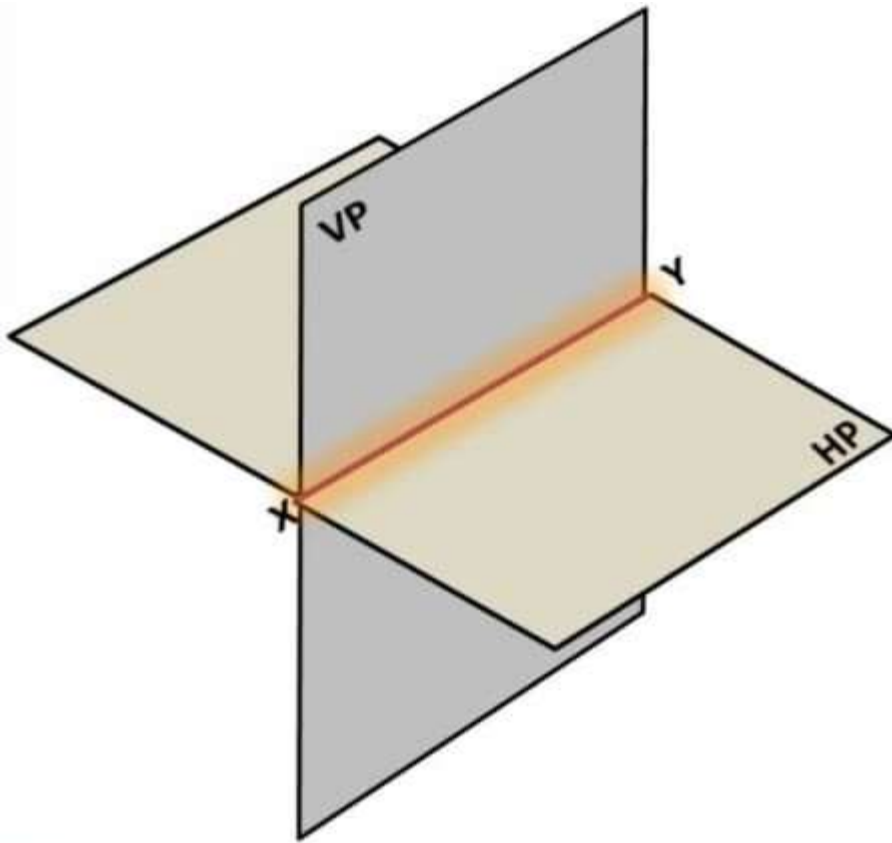


First Angle Projection (1st Quadrant)

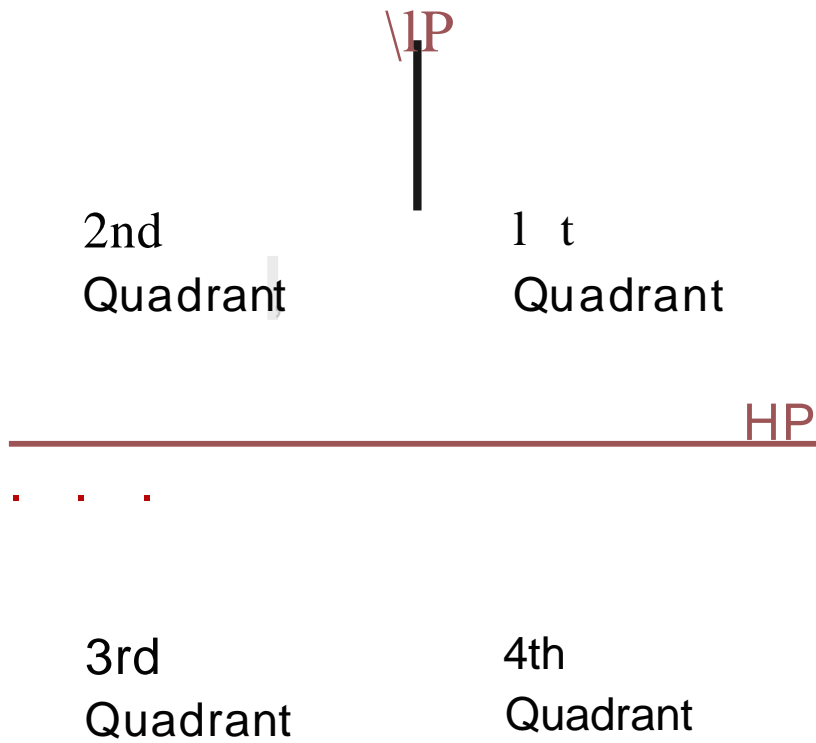


Four Quadrants





Four Quadrants



Orthographic Projection

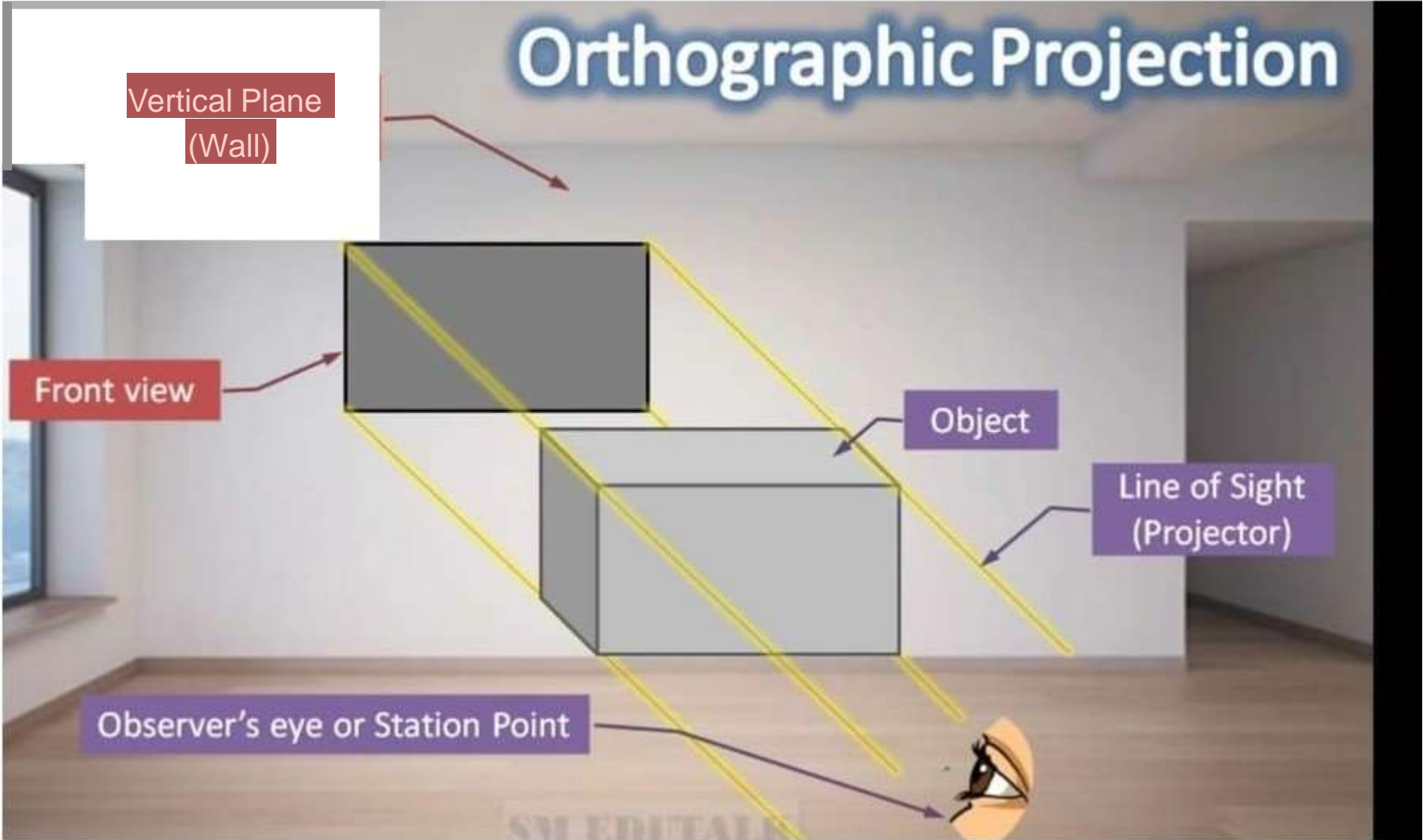
Vertical Plane
(Wall)

Front view

Object

Line of Sight
(Projector)

Observer's eye or Station Point



Observer's eye or Station Point

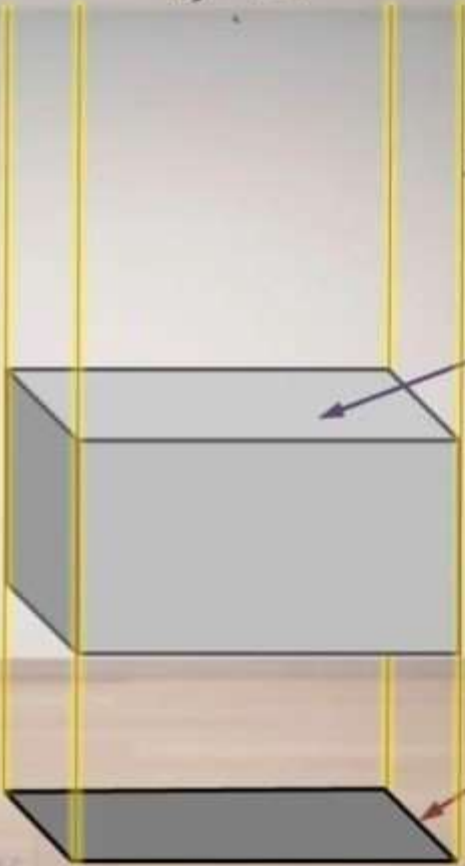


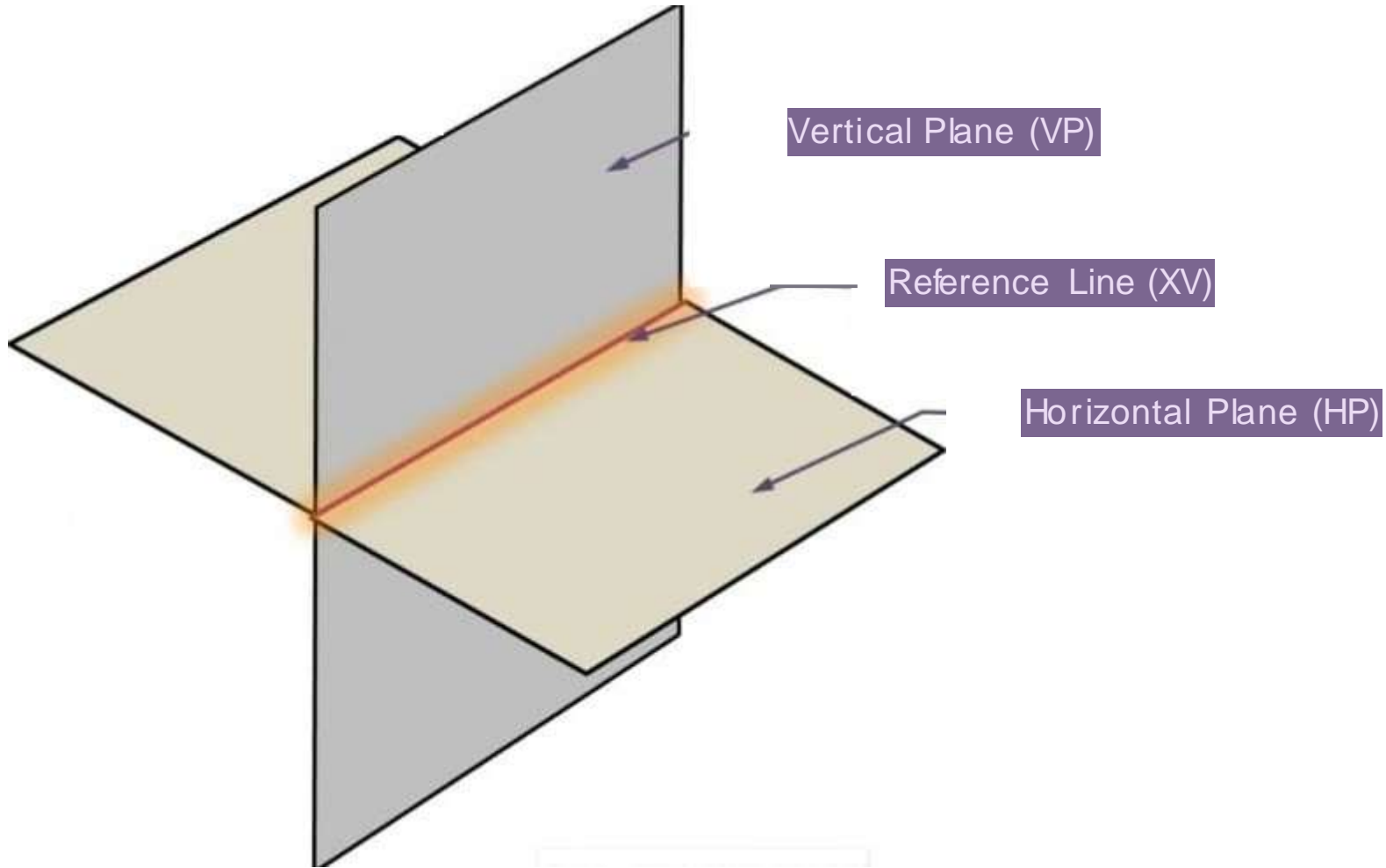
Line of Sight (Projector)

Object

Horizontal Plane (Floor)

Top view





Orthographic Projection

