



Engineering Virtual Learning

**HS Mechanical Drafting
Lesson #27**

May 12, 2020



Objective/Learning Target:
Students will Utilize Drawing Skills
in Sketching Various Types of Objects.

Bell-Work:

Watch the following video on Sketching Cubes.

<https://www.youtube.com/watch?v=rYNna3s9SW8>

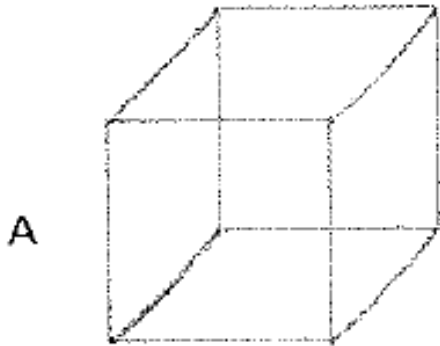
Do you need a Horizon Line for every drawing?

Why are Construction Lines helpful?
(answer in your engineer's notebook)

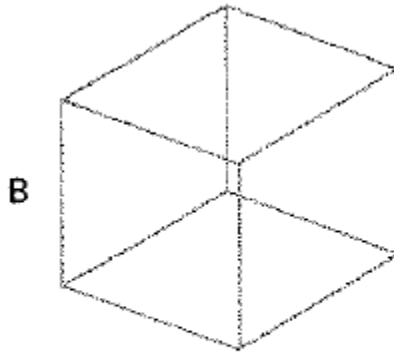
Learning Practice: Concept Sketching

Use your engineers notebook or the Graph Paper printed from the resources link to recreate the following objects: Depending on which face or edge you focus on, these look different. We call this an “Optical Illusion”

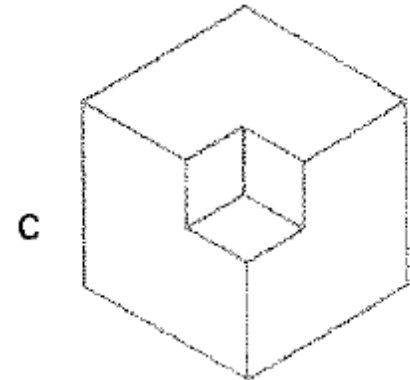
Use lines to show how you can control wireframe cubes A, B, and C.



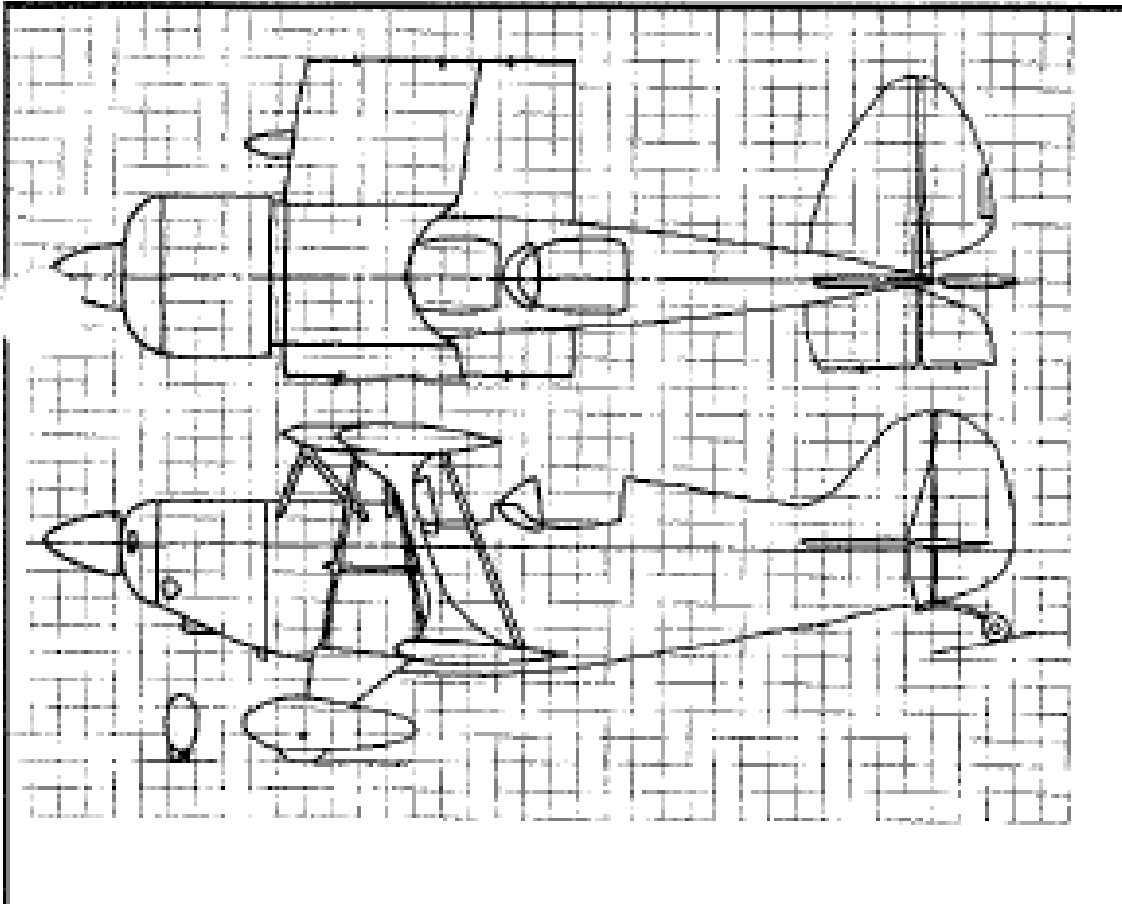
Which square tends to stay in front?



Can the top view dominate?
Do the top and bottom views fluctuate readily?



Is the small cube projecting from, or cut out of, the large cube?



Recreate the Bi-Plane on Blank or Graph paper.

Make sure to use very light construction lines to lay the object out first.

How is this different from drawing the cubes?

Refer to the Concept Sketching videos in the resources links for help.

Learning Resource Links:

Concept Sketching:

https://www.youtube.com/watch?v=z8_-J8V6E38

<https://www.youtube.com/watch?v=s80WqMyVIsY>

Grid and Isometric Graph paper:

https://www.printablepaper.net/category/isometric_graph