



Engineering Virtual Learning

**HS Machine 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>

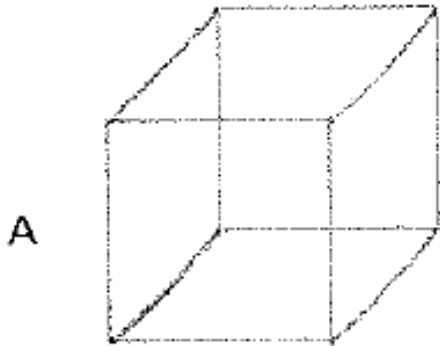
Do you need a Horizon Line for every drawing?

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

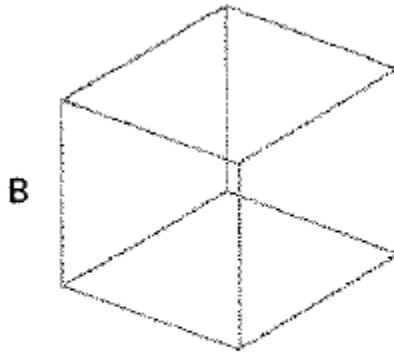
Learning Practice: Concept Sketching

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”

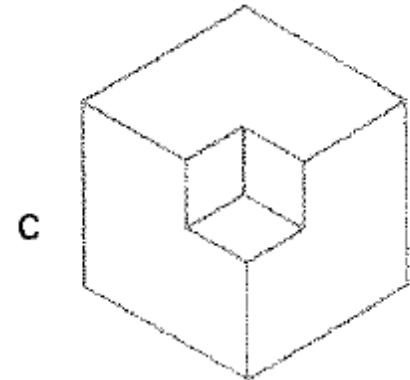
Use lines to show how you can control wireframe cubes A, B, and C.



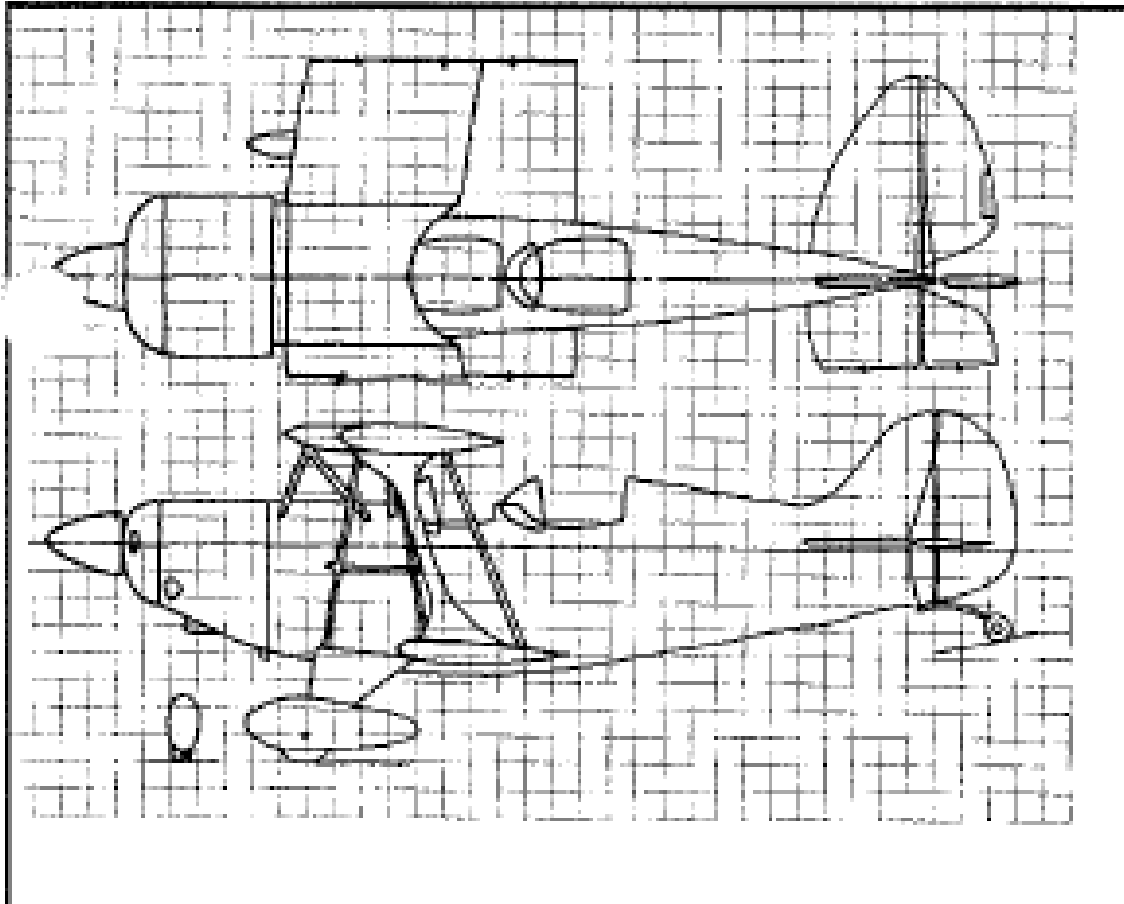
Which square tends to stay in front?



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