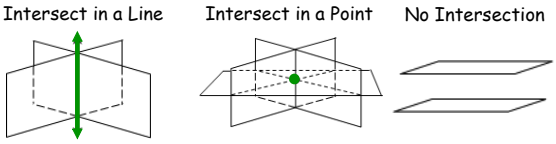
Math 7H - Unit 5

Day 12 - 3D Figures Review

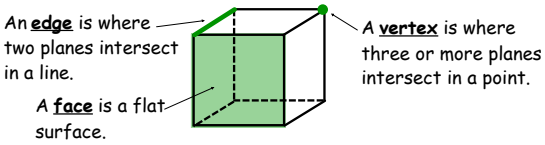
Lesson Objectives:

- Draw geometric shapes with given conditions.
- Solve real-world and mathematical problems involving three-dimensional objects.

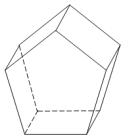
A **plane** is a two-dimensional flat surface that extends in all directions.

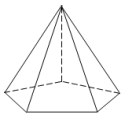


Intersecting planes can also form three-dimensional figures or **solids**. A **polyhedron** is a solid with flat surfaces that are polygons.



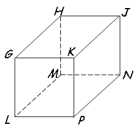
A **prism** is a polyhedron with two parallel congruent faces called **bases**.

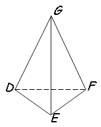




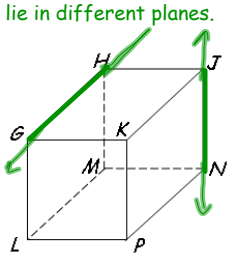
A **pyramid** is a polyhedron with one base that is any polygon. Its other faces are triangles.

Identify each solid. Name the bases, faces, edges, and vertices.

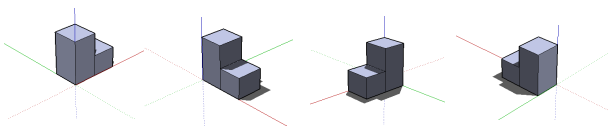




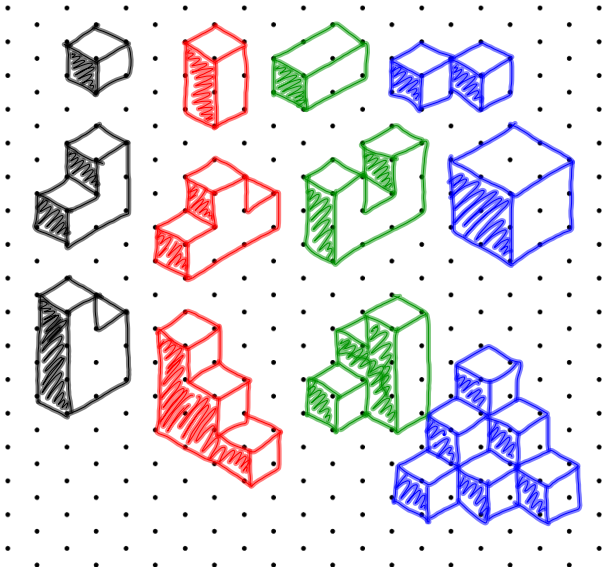
Skew lines are lines that are neither intersecting nor parallel. They lie in different planes.



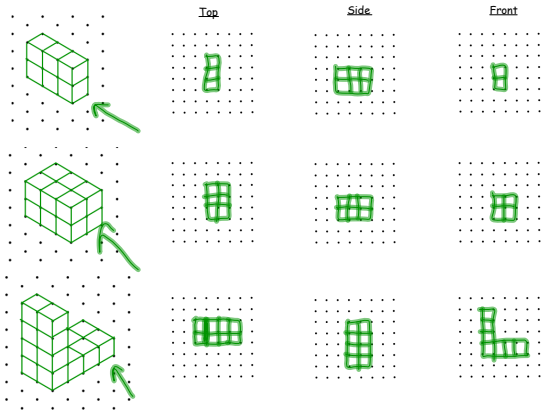
Sometimes it is useful to look at three-dimensional figures from a different point of view or **perspective**.



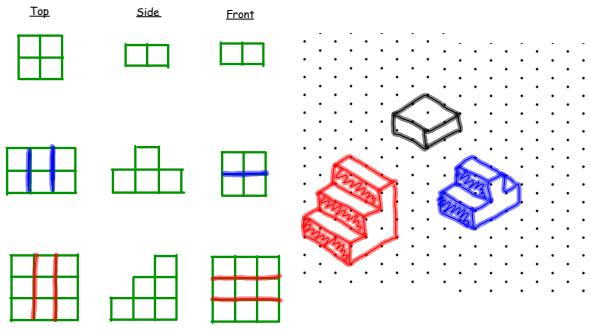
We use isometric dot paper to help us draw 3D figures from different perspectives.



Draw and label the top view, a side view, and the front view for each figure.



The top view, a side view, and the front view of three-dimensional figures are shown. Draw a model on isometric paper.



Homework

Drawing 3D Figures WKS

* Individual Think Time *

What to do if you get stuck...

1. Reread the problem. Did you write it down correctly?
2. Reread your notes. Is there a problem similar that we did together in class?
3. Find a problem similar in your book. Try this one to see if it helps.
4. Skip the problem until the end of Individual Think Time. Then ask an "educated" question of a neighbor or Mrs. Call.

Today we're working by...