

Understanding Intersection, Parallel, and Skew

Record the names of group members and the jobs (described below) that each member was assigned:

Group Members	Job Assignment

Job description:

- a). Materials Manager (gets materials needed)
- b). Facilitator (keeps you on task)
- c). Scribe (writes information on the workpaper including definitions...remember, a scribe just writes what other group members provide)
- d). Time Keeper (to keep track of the time left to work)

Materials needed:

- a). One set of activity sheets
- b). One blank piece of white paper
- c). One hexahedron pattern and one tetrahedron pattern
- d). Pencil and eraser
- e). Ruler
- f). Glue stick
- g). Scissors
- h). Geometry textbook

Activity Requirements:

- a). Look up and write down the definitions.
- b). Complete #1 on the next page, draw a rectangular prism and answer the questions asked.
- c). Complete #2, construct the hexahedron and answer the questions asked.
- d). Complete #3, construct the tetrahedron and answer the questions asked.
- e). **IMPORTANT: A different group member should work on the construction of each part. The group TOGETHER needs to answer the questions.**

Time to complete the is project is 30 minutes, so budget your time wisely.

DEFINITIONS FOR YOU TO COMPLETE:

Intersection:

Parallel Lines:

Parallel Planes:

Skew Lines:

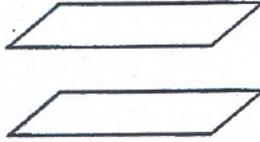
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1. Drawing a Rectangular Prism

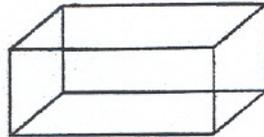
Materials:  plain paper  straightedge  colored pencils

A rectangular prism resembles a show box or a cereal box. You can draw a diagram of a rectangular prism by drawing parallel planes.

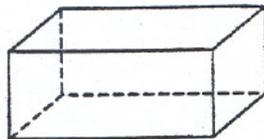
- Draw two figures to represent the top and bottom of the prism. *These are similar to the figures used to represent parallel planes.*



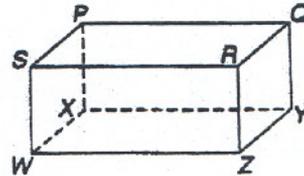
- Draw the vertical edges.



- Make the hidden edges of the prism dashed.



- Label the vertices of the prism.



Your Turn

- Name the parallel planes
- Name the planes that intersect plane PQR and name their intersection.

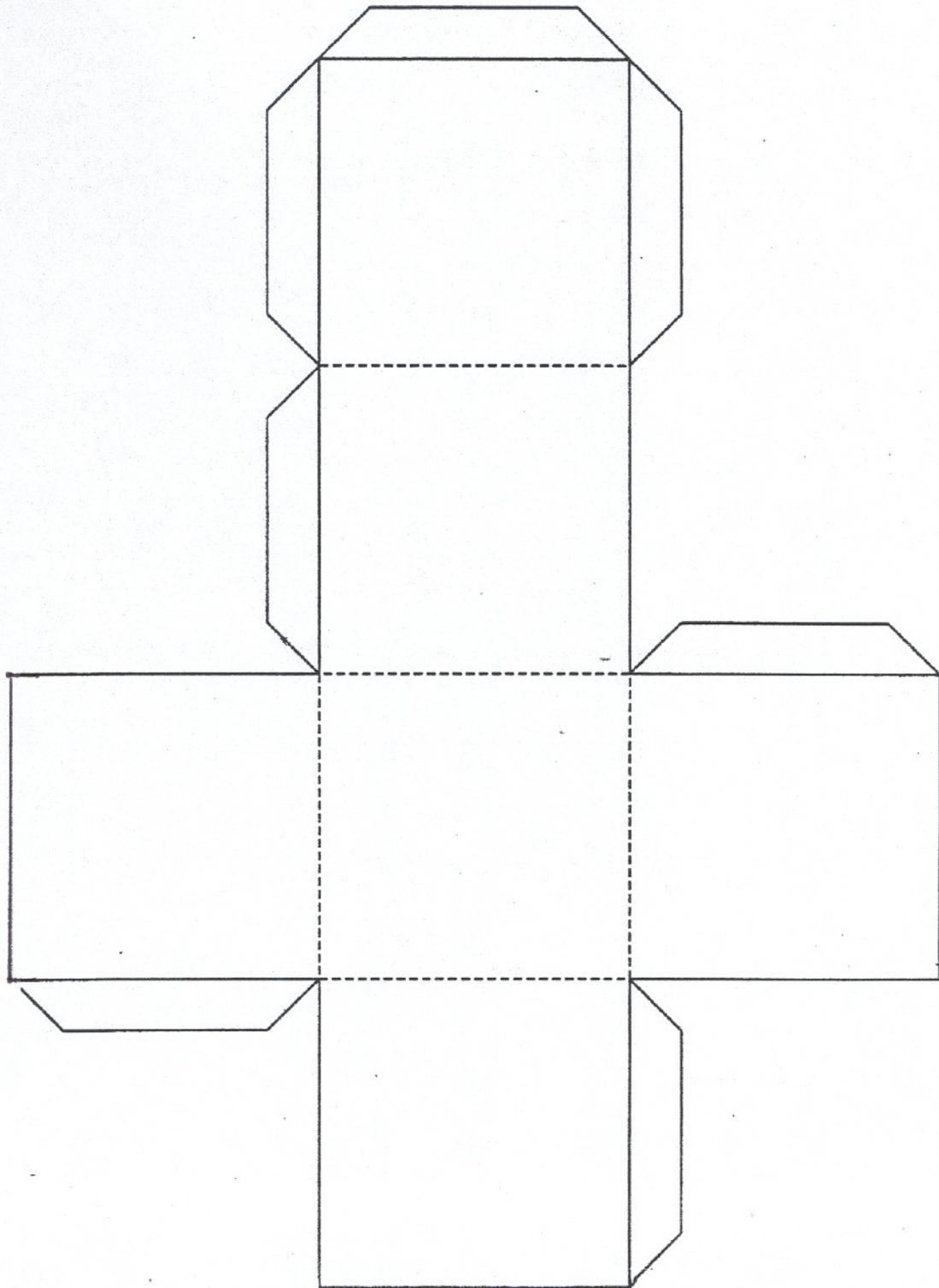
2. Construct the hexahedron from the pattern and label as above.

- Name all planes that are parallel to plane QRY :
- Name segments that intersect line segment WX :
- Name all segments that are parallel to line segment SR :
- Name all segments that are skew to line segment ZY :

3. Construct the tetrahedron from the pattern and label the points ABC and D .

- Name all planes that are parallel to plane ABD :
- Name all planes that intersect plane ABD :
- Name all segments that intersect line segment AC :
- Name all segments that are skew to line segment AC :

Hexahedron
Pattern



Tetrahedron
Pattern

