

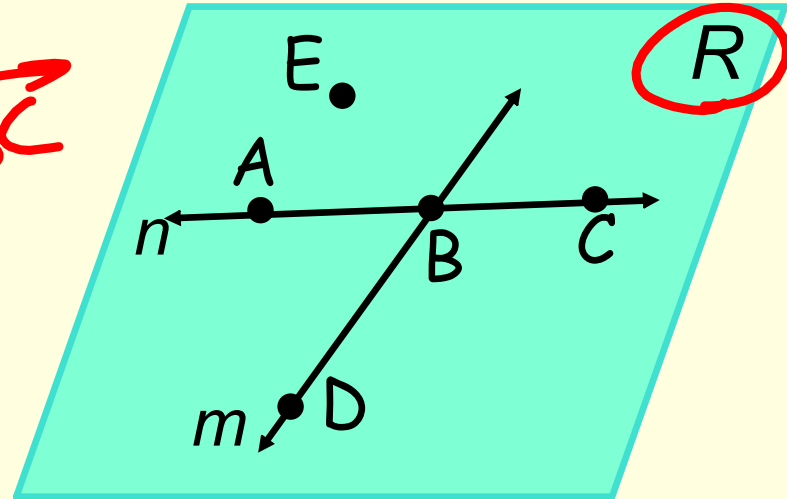
8/26/19 - Warm Up Problem

1. What is another name for line n ? **line BC**



2. What is another name for Plane R ? **Plane D, B, E**

3. Name 3 points that are collinear. **ABC**



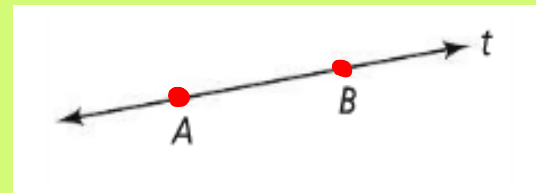
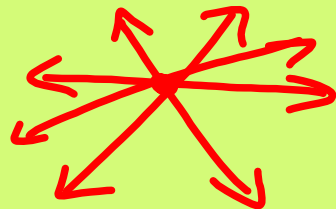
Concept 1 - Basic Geometric Figures

Goals: Identify intersections of lines and planes
Determine if points are coplanar

Postulate (Axiom): an accepted statement of fact

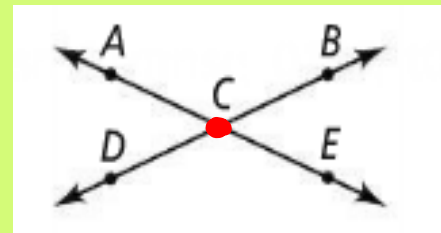
Postulate 1-1

Through any 2 points there is exactly one line.

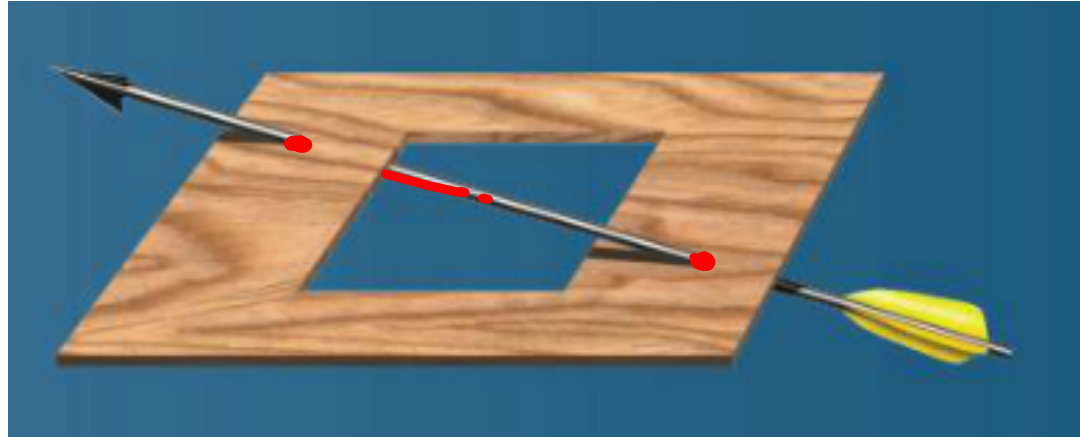


Postulate 1-2

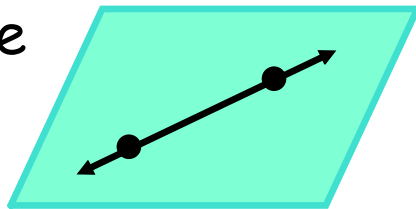
If two distinct lines intersect, then they intersect in exactly 1 point.



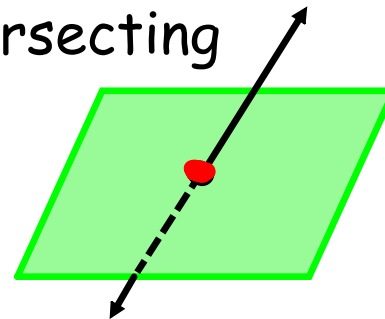
Using a straight arrow and a solid flat board is it possible to construct the figure in the picture?



line contained
in a plane

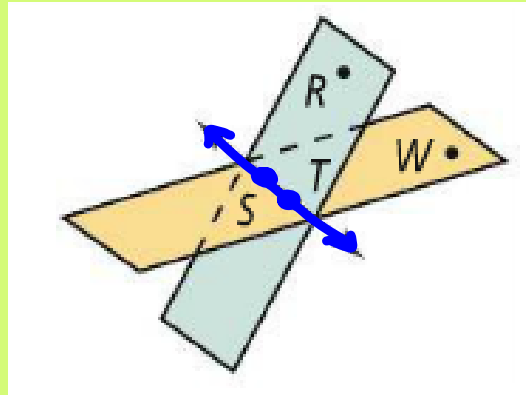


line intersecting
a plane



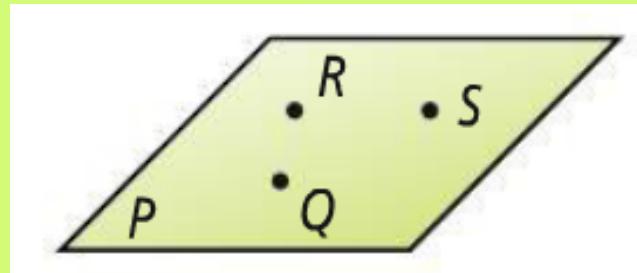
Postulate 1-3

If two distinct planes intersect, then they intersect in exactly one line



Postulate 1-4

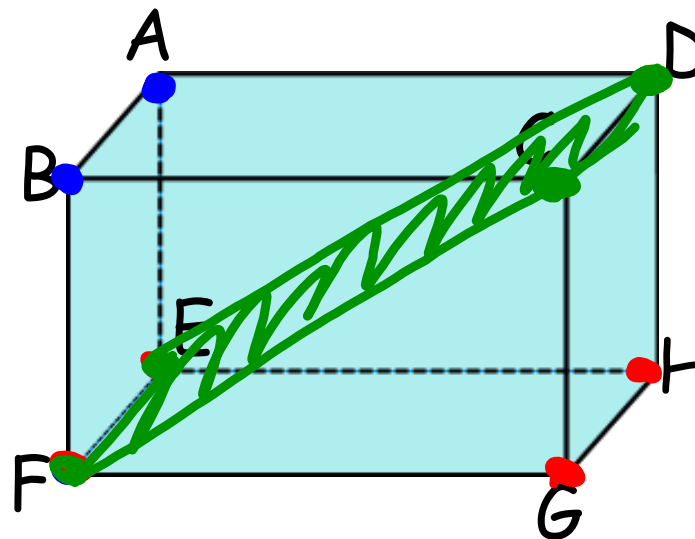
Through any 3 noncollinear points there is exactly one plane.



Name a point that is coplanar with B, E, and A. **F**

Name point that is coplanar with F, H, and G. **E**

Name a point that is coplanar with F, E, and C. **D**

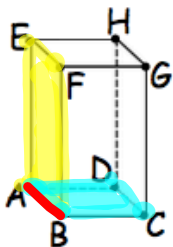


Examples in Notes

The Intersection of 2 Planes is a line.

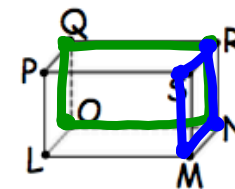
Name the intersection of
Plane EFA and Plane DBC.

\overleftrightarrow{AB}



Name the intersection of
Plane QRO and Plane RNMS.

\overleftrightarrow{RN}



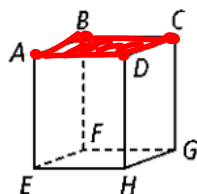
Assignment:

Concept 1 Worksheet (#14-24)

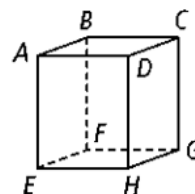
INTERSECTIONS OF LINES AND PLANES

Shade the plane that contains the given points.

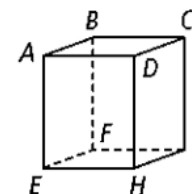
14. A, B, C



15. C, D, H



16. E, F, D

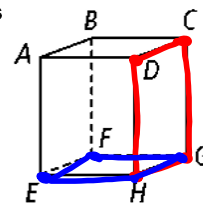


Name the intersection of each pair of planes

17. planes DCG and EFG H \overleftrightarrow{HG}

18. planes EFG and ADH

19. planes BCG and ABF



Use the figure at the right for # 19-23. Name the intersection of each pair of planes or lines.

Remember: Two lines intersect in exactly 1 point, but two planes intersect in exactly 1 line.

20. planes AOR and QRO

21. \overline{RQ} and \overline{RO}

22. planes ADR and DCQ

23. planes BCD and BCQ

24. \overline{OP} and \overline{QP}

