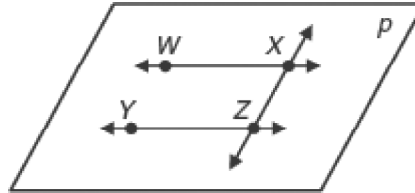
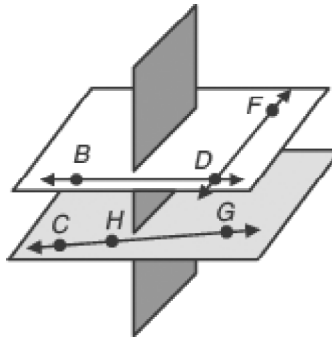


PAP Geometry - HW 1.1 - Points, Lines, Planes, Rays, and Line Segments

1. Identify each of the following in the figure shown.

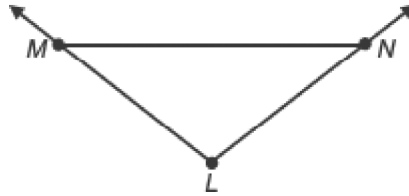


- a. Name all points.
 - b. Name all lines.
 - c. Name all planes.
2. Identify each of the following in the figure shown.



- a. Name all collinear points.
- b. Name all coplanar lines.
- c. Name all skew lines.

3. Identify each of the following in the figure shown.



- Name all rays and identify each endpoint.
 - Name all line segments and identify the endpoints.
4. Explain the differences among sketching a geometric figure, drawing a geometric figure, and constructing a geometric figure.
5. Sketch two planes whose intersection is a line.
6. Sketch three planes whose intersection is a point.
7. Use a symbol to represent the name of each geometric figure.

a.



b.



c.



Vocabulary

Write the term that best completes each statement.

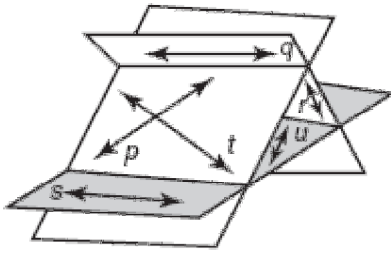
8. A geometric figure created without using tools is a(n) _____.
9. _____ are two or more lines that are not in the same plane.
10. A(n) _____ is a location in space.
11. The points where a line segment begins and ends are the _____.
12. A(n) _____ is a straight continuous arrangement of an infinite number of points.
13. Two or more line segments of equal measure are _____.
14. You _____ a geometric figure when you use only a compass and straightedge.
15. Points that are all located on the same line are _____.
16. A(n) _____ is a portion of a line that includes two points and all of the collinear points between the two points.
17. A flat surface is a(n) _____.
18. A(n) _____ is a portion of a line that begins with a single point and extends infinitely in one direction.
19. Two or more lines located in the same plane are _____.
20. When you _____ a geometric figure, you use tools such as a ruler, straightedge, compass, or protractor.

Draw a figure for each description. Label all points mentioned in the description.

21. Points R , S , and T are collinear such that point T is located halfway between points S and R .
22. Points F , G , and H are collinear such that point F is between points G and H and the distance between points F and G is one third the distance between points G and H .

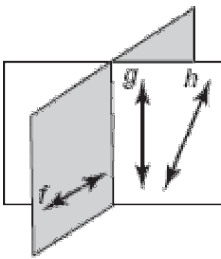
Identify all examples of coplanar lines in each figure.

23.

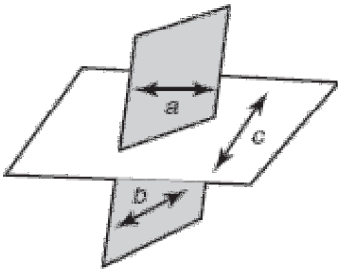


Identify all skew lines in each figure.

24.



25.



Draw and label an example of each geometric figure.

26. \overleftrightarrow{XY}

27. \overline{CD}

28. \overrightarrow{KJ}

Use a ruler to measure each segment to the nearest centimeter. Then use symbols to express the measure of each segment.

29. _____

30.