

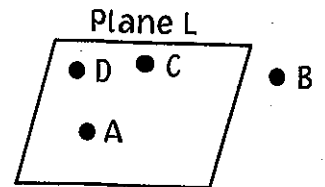
### Coplanar Points

### Points, Lines, and Angles

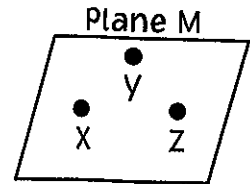
#### Flat-Plane Rule

If three points are coplanar, then the line containing two of the points is in the same plane.

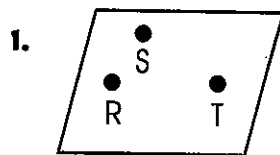
Points A and B cannot form a line in plane L because they are not coplanar.



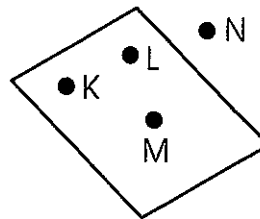
Points X and Y can form a line in plane M because they are coplanar.



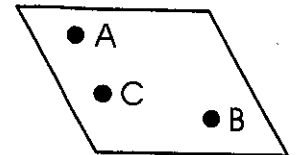
Determine whether the points can form a line in the given plane. Then, write Yes or No.



2.



3.



Points R and S \_\_\_\_\_

Points M and N \_\_\_\_\_

Points A and B \_\_\_\_\_

Draw and label each of the following.

4. Three collinear points in plane A

5. Three coplanar points in plane C

6. LN exists in plane M

7. One point that is not coplanar to plane S

8. Points D, E, F are collinear in plane A, but not in plane B

9. Collinear points Q, R, and S in plane P

**Review****Points, Lines, and Angles**

Write the letter for the correct term beside each definition.

1. \_\_\_\_\_ The point at which two lines intersect
2. \_\_\_\_\_ A set of points in a straight path that extends infinitely in both directions
3. \_\_\_\_\_ Two lines that form a right angle at their point of intersection
4. \_\_\_\_\_ Position in space, often represented by a dot
5. \_\_\_\_\_ A finite portion of a line that has two endpoints
6. \_\_\_\_\_ Three or more points that lie in the same line
7. \_\_\_\_\_ A point that bisects a line segment
8. \_\_\_\_\_ Lines in the same plane that never intersect
9. \_\_\_\_\_ A portion of a line that extends from one endpoint infinitely in one direction
10. \_\_\_\_\_ A flat surface that extends infinitely in all directions
11. \_\_\_\_\_ Two rays that share an endpoint and extend in opposite directions to form a line
12. \_\_\_\_\_ Something that relates to or resembles a line
13. \_\_\_\_\_ Three or more points that lie in the same plane
14. \_\_\_\_\_ If three points are coplanar, then the line containing two of the points is in the same plane.

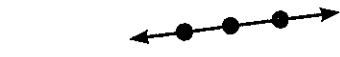
- |                          |
|--------------------------|
| A. opposite rays         |
| B. point                 |
| C. ray                   |
| D. point of intersection |
| E. linear                |
| F. midpoint              |
| G. parallel lines        |
| H. collinear points      |
| I. perpendicular lines   |
| J. line segment          |
| K. line                  |
| L. plane                 |
| M. coplanar points       |
| N. flat-plane rule       |

Write the letter for the correct term beside each diagram.

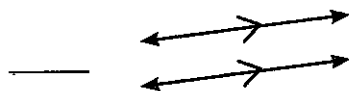
15.



17.



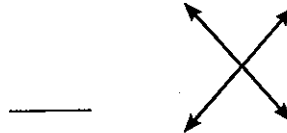
19.



16.



18.



20.



- |                       |
|-----------------------|
| A. intersecting lines |
| B. line               |
| C. line segment       |
| D. parallel lines     |
| E. coplanar points    |
| F. collinear points   |