

Practice A

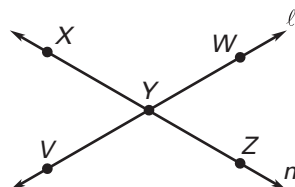
For use with pages 10–16

Draw a sketch and label as needed.

- Three collinear points, A , B , and C .
- \overleftrightarrow{MN} intersecting \overleftrightarrow{PQ} at point R .
- Coplanar points W , X , Y , and Z .
- Opposite rays, \overrightarrow{JK} and \overrightarrow{JC} .

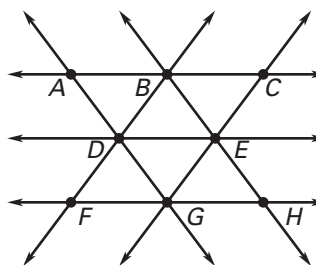
Decide whether the statement is true or false.

- | | |
|----------------------------------|--|
| 5. Point X lies on line m . | 6. X , Y , and Z are collinear. |
| 7. Point W lies on line m . | 8. X , Y , and Z are coplanar. |
| 9. Point V lies on line l . | 10. V , Y , and X are collinear. |
| 11. Point Y lies on line l . | 12. V , Y , and X are coplanar. |



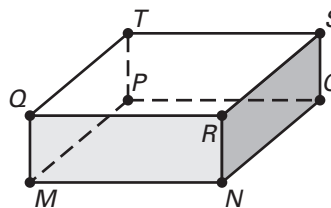
Name a point that is collinear with the given points.

- | | |
|-----------------|-----------------|
| 13. B and E | 14. F and H |
| 15. D and G | 16. A and C |
| 17. H and E | 18. G and C |
| 19. A and D | 20. B and C |



Name a point that is coplanar with the given points.

- | | |
|-------------------------|-------------------------|
| 21. M , N , and O | 22. M , N , and R |
| 23. T , Q , and M | 24. T , Q , and R |
| 25. T , S , and R | 26. T , S , and O |
| 27. O , S , and R | 28. O , P , and M |



In Exercises 29–34, complete the sentence.

- Collinear points are points that _____.
- Coplanar points are points that _____.
- \overline{XY} consists of the endpoints X and Y and all points on the line \overleftrightarrow{XY} that lie _____.
- \overrightarrow{MN} consists of the initial point M and all points on the line \overleftrightarrow{MN} that lie _____.
- Two rays or segments are collinear if they _____.
- \overrightarrow{PQ} and \overrightarrow{PT} are opposite rays if _____.
- Explain the difference between \overrightarrow{BC} and \overrightarrow{CB} .