

**Definitions:** Write a definition for the geometry term.

1. Collinear: \_\_\_\_\_
2. Coplanar: \_\_\_\_\_
3. Parallel Lines: \_\_\_\_\_
4. Skew Lines: \_\_\_\_\_
5. Perpendicular Lines: \_\_\_\_\_
6. Midpoint: \_\_\_\_\_
7. Segment Bisector: \_\_\_\_\_
8. Perpendicular Bisector: \_\_\_\_\_
9. Angle Bisector: \_\_\_\_\_
10. Plane: \_\_\_\_\_

**The “Plane” Facts:** Write a short response.

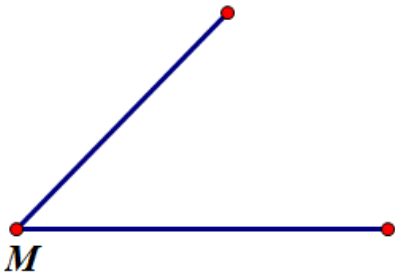
11. What is the minimum number of points that determine a line? Explain.
  
  
  
  
  
  
  
  
  
  
12. What is the minimum number of (non-collinear) points that determine a plane? Explain.

13. Construct and label an equilateral triangle that has sides equal to the length of segment CD.



14a. Construct and label a copy of angle M. Write an equality statement about the angles.

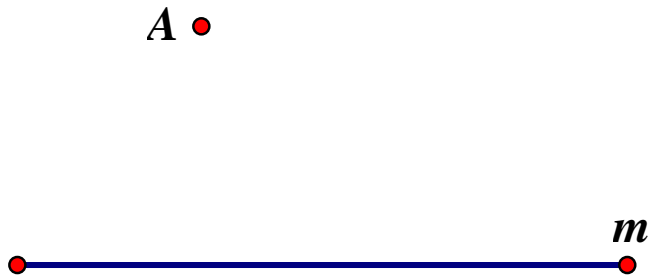
b. Construct the bisector of angle M. Write a congruency statement about the angles formed.



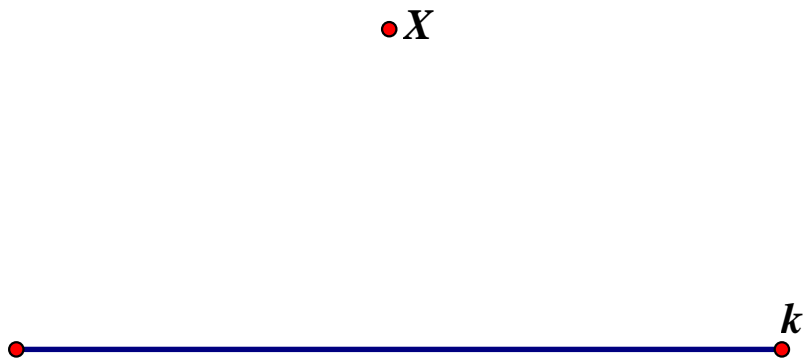
15. Construct and label the perpendicular bisector of segment AB. Write a congruency statement based on the construction.



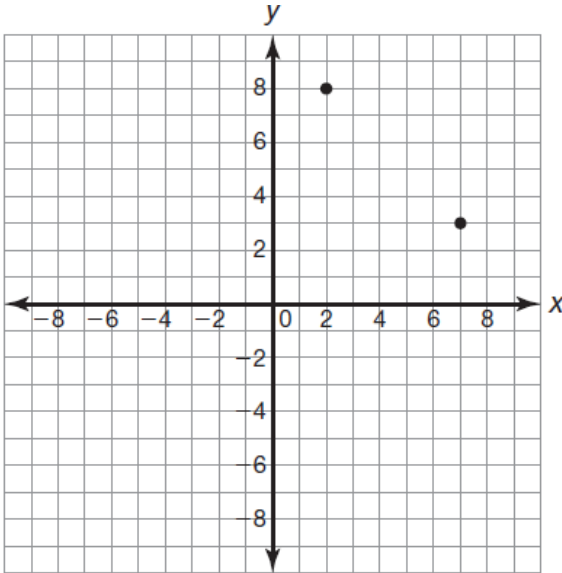
16. Construct and label a line through A and parallel to line  $m$ . Use geometry symbols to write a statement about the lines being parallel.



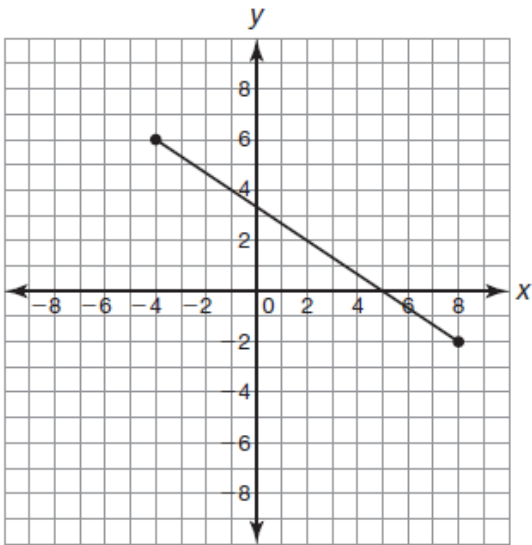
17. Construct and label a line through X and perpendicular to line  $k$ . Use geometry symbols to write a statement about the lines being perpendicular.



18. Calculate the distance between the pair of given points. Round your answer to the nearest tenth. Use of the grid is optional, but you must show how you arrived at your answer.



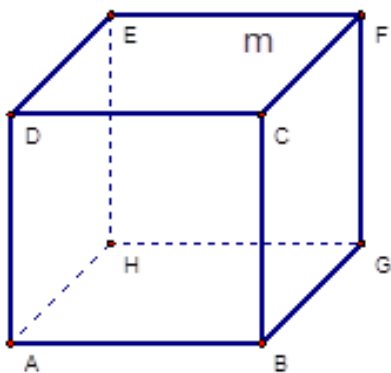
19. Use of the grid is optional, but you must show how you arrived at your answer.



a. State the coordinates of the point that is  $\frac{1}{2}$  between the given points. Graph the point on the grid and label it M.

b. State the coordinates of the point that is  $\frac{1}{4}$  of the distance away from the left end point. Graph the point on the grid and label it P.

20. Base your answers on the picture.



a. Name the left plane.

b. Name the intersection of plane EFG and plane m.

c. Name a point that is coplanar with points D, A, and G.

d. Name two lines that are skew.