Sec 1.1-Transformation in the Coordinate Plane Geometric Definitions
Define the following Geometric terms:
Pe int : A geametric dgect that has novidth, noheight, and nolength

- It is usually used to desaibea location.

L $\uparrow$ NE: $A$ "straight"geametric doject that extends infinitely in qposite directions withait any width or thidkness.
SECMENT: A "straight" geametric dject withaut any width or thickness - . and has a starting and ending point.

$R \wedge Y: A$ "straight"dgect without any width or thickness that begins | $\square$ | at a paint and extands forever in aneofrection. |
| :--- | :--- |

$P$ Iane: A flat geametric dgeet with infinitelength and width lut no Coi.:inear:

 Thickness. (eg. Visualizean infinitdy largepieceof pappr with nothickness.) LTWR: A set of 3 ar maredistinct points that coulld all lbean a | $\alpha^{\circ}$ | singlelline |
| :---: | :---: | $\therefore$ ringleplane. A geametric djeet that cauld bedesaibal as twodifferent rays 2 emanating from thesamestarting paint. Para ${ }^{\ddagger}$ el Lines: Paralle lines aretwodistindt lines that arein thesameplane PErpEndicular Lines: Papandiallar lines aretuodistindt lines that intersect to $\stackrel{\leftrightarrow}{\Downarrow}$ farm right angles: : Skewlines aretuodistinct lines that areNOT in thesame planeand thareforeneve intarsect. Circ|e: A geametric dject that cauld loedesailbed as theset of all paints :\%) In a plane that areequidistant from a common paint.

Use the word bank below to describe each object or set of objects.


1. How would you best describe the purple geometric shape shown in the diagram at the right?
ANGLE
2. How would you best describe the red geometric shape shown in the diagram at the right?
CIRCLE
3. How would you best describe the center of the circle shown in the diagram at the right?

PoINT
4. How would you best describe the pink geometric shape shown in the diagram above?

5. How would you best describe the blue geometric shape shown in the diagram above?
SEGMENT AND RADIUS
6. How would you best describe the green geometric shape shown in the diagram above?
LINE
7. How would you best describe the orange geometric shape shown in the diagram above?
SEGMENT AND DIAMETER
8. How would you best describe the relation between the set of geometric shapes Point A, Point B, and Point C? COLLINEAR
9. How would you best describe the relation between the set of green and orange geometric shapes?

PERPENDICULAR

Use the word bank below to describe each object or set of objects.


The geometric shape shown in the diagram below is a 3-dimensional rectanguiar prism.
10. How would you best describe the relationship between the line $\overleftrightarrow{A C}$ and the line $\overleftrightarrow{G I}$ ?
11. How would you best describe the relationship between the line $\overleftrightarrow{A C}$ and the segment $\overline{A G}$ ?
PERPENDICULAR
12. How would you best describe the relationship between the line $\overleftrightarrow{A C}$ and the line $\overleftrightarrow{D E}$ ?


## SKEW

13. How would you best describe the set of Point A, Point B, Point J and Point H?
COPLANAR
14. How would you best describe the set of Point G, Point H, and Point I? Collinear
15. Trug) or False) Any 3 distinct points are always coplanar.

16. (True or alsfi) Any 2 distinct circles are always coplanar.
17. (true) or False) If 2 lines intersect once then the lines are coplanar.

18. (True orfalse) Two lines that are skew can sometimes intersect.
19. Truer False) An angle and a circle can have more than 3 intersections.

20. (True or 1 (alse) Two distinct circles can have more than 2 intersections.
21. (ruser False) Any given line and point are always coplanar.

