

**GEOMETRY
HONORS
CLASS NOTES**

Name: _____

Section(s): 1.1 Period: _____ Date: _____

Key Question: _____

Questions/
Main Ideas:

Warm-up:

a. $22 + (-6)$

b. $-81 - (-30)$

c. $|21 + (-35)|$

Notes:

- A _____ has no size. It may be represented by a dot and named with a single capital letter.
- A _____ extends forever in both directions, but has no thickness. A line is named using either the names of two points on the line or a single lower-case letter.
- Points that lie on the same line are called _____. Any two points are collinear.
- A _____ is like a flat surface that extends forever in all directions but has no thickness. A plane is named using either the names of three points that lie in the plane and are not collinear, or by a single script capital letter.
- Points that lie in the same plane are _____. Any three points are coplanar.

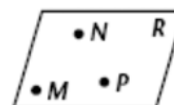
Example 1 - Name each figure.

a. •*p*

b.



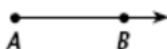
c.



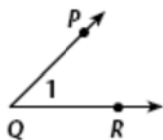
- A _____ is a part of a line that consists of two points, called the endpoints, and all the points between them. The segment with endpoints *X* and *Y* is denoted \overline{XY} .



- A _____ is a part of a line that has one endpoint and extends without end in one direction. The ray that has endpoint *A* and contains point *B* is denoted \overrightarrow{AB} .

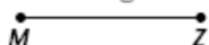


- An _____ is a figure formed by two rays that do not lie on the same line, but have the same endpoint. The common endpoint is the _____ of the angle. The angle in the figure at below may be referred to as $\angle PQR$, $\angle RQP$, $\angle 1$, or $\angle Q$. If two angles have the same vertex, they must be named using numbers or three letters.

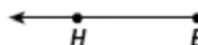


Example 2 -Name each figure.

a.



b.



c.



The _____ that follow are fundamental geometric ideas.

- The intersection of two _____ is a point.
- The intersection of two _____ is a line.
- Through any two _____, there is exactly one line.
- Through any three noncollinear _____, there is exactly one plane.
- If two _____ are in a plane, then the _____ containing them is in the plane.

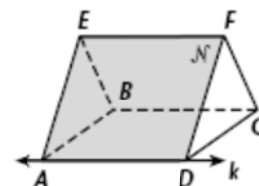
Example 3 - Name each of the following.

a. the intersection of \overline{AB} and line k

b. the intersection of planes \mathcal{N} and CDF

c. the line containing points A and D

d. all the planes shown that contain \overline{BE}



Summary: _____
