

## Warmup 1/(# of days we have had so far in 2020, including today)

1. Write the equation of a line in slope intercept form of a line that has a slope of  $-2$  and contains  $(1, -6)$ .
2. Simplify using exponent rules.
  - $x^4 \cdot x^6$  \_\_\_\_\_
  - $\frac{x^{10}}{x^7}$  \_\_\_\_\_
  - $(x^3)^6$  \_\_\_\_\_
  - $(3)^{-3}$  \_\_\_\_\_
3. Find the slope between the following points:  $(-1, 8)$ , and  $(7, 2)$

# Collect Benchmarks

point

Coplanar

line

midpoint

plane

Segment bisector

line segment

angle

ray

angle bisector

Collinear

postulate

# Point

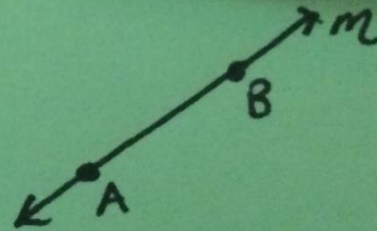
A location  
in space

• P  
point P

line

# Line

a straight path  
that extends  
forever  
(one dimensional)



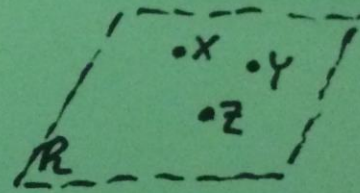
line  $m$   
 $\longleftrightarrow$   
AB  
 $\longleftrightarrow$   
BA

plane

point

# Plane

a flat surface with  
no thickness that  
extends forever  
(two dimensional)



plane  $R$   
plane  $XYZ$   
plane  $ZXY$   
plane  $YZX$

line segment

# Undefined Terms

- Point, line, and plane are undefined terms. We call them this because they are the most basic terms in Geometry.
- They cannot be defined using other terms.
- These are the “building blocks” that everything else in geometry is based off of.

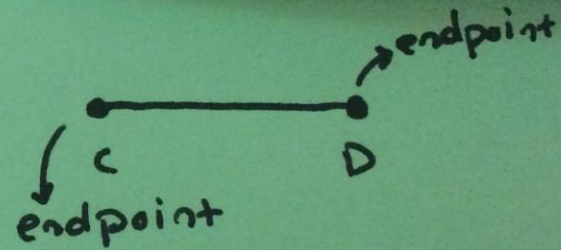
# Defined Terms

- Now that we know what undefined terms are, what are defined terms?
- What is classified as a defined term?
- Defined terms are terms that are defined by undefined terms.



# Line Segment

a portion of a line  
with two endpoints



$\overline{CD}$   
 $\overline{DC}$

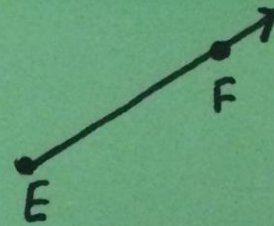
plane

ray

# Ray

a portion of a line that starts at an endpoint and extends forever in one direction

line segment



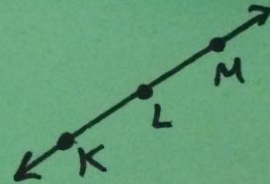
$\overrightarrow{EF}$

## Quick Reflection

- Is  $\overrightarrow{KJ}$  the same as  $\overrightarrow{JK}$  ?

# Collinear

points that  
lie on the  
same line



K, L, and M  
are collinear

ray