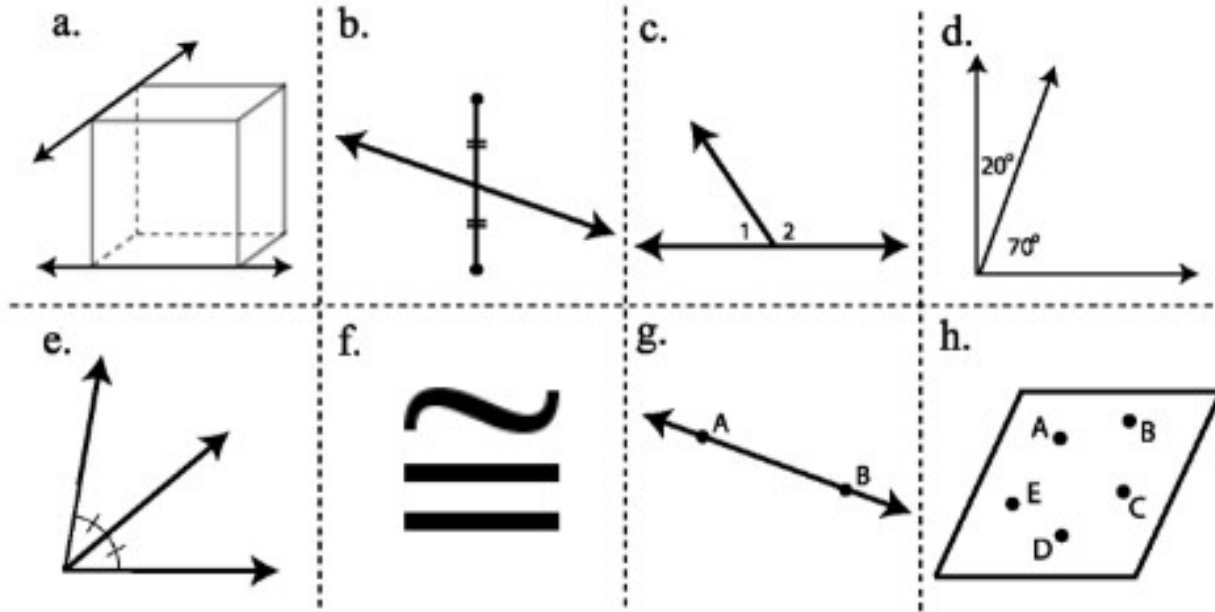


# 6.1 Intro to Geometric Properties

OBJ: examine the properties of lines and angles.

Directions: Match each of the following pictures with the vocabulary listed below.



- 1. \_\_\_\_\_ Line AB
- 2. \_\_\_\_\_ Linear Pair Angles
- 3. \_\_\_\_\_ Coplanar points
- 4. \_\_\_\_\_ Congruent (Symbol)
- 5. \_\_\_\_\_ Skew lines
- 6. \_\_\_\_\_ Complementary Angles
- 7. \_\_\_\_\_ Segment bisector
- 8. \_\_\_\_\_ Angle bisector

Important Vocabulary		Picture
Vertical Angles:		
Corresponding Angles:		
Alternate Interior Angles:		
Alternate Exterior Angles:		
Linear Pair:		
Consecutive Interior Angles:		
Consecutive Exterior Angles:		

**Directions:** Draw and label three types of triangles classified by angles.

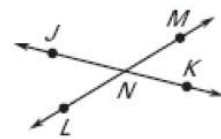
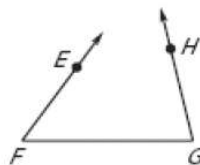
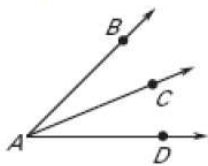
<b>Name:</b>			
<b>Picture:</b>			
<b>Definition:</b>			

**Directions:** Draw and label three types of triangles classified by sides.

<b>Name:</b>			
<b>Picture:</b>			
<b>Definition:</b>			

Are the indicated angles *adjacent*?

1. \_\_\_\_\_  $\angle BAC$  and  $\angle CAD$     2. \_\_\_\_\_  $\angle EFG$  and  $\angle HGF$     3. \_\_\_\_\_  $\angle JNM$  and  $\angle LNK$



$\angle 1$  and  $\angle 2$  are *complementary* angles. Given the measure of  $\angle 1$ , find  $m\angle 2$ .

6.  $m\angle 1 = 52^\circ$ ,  $m\angle 2 =$  \_\_\_\_\_    7.  $m\angle 1 = 76^\circ$ ,  $m\angle 2 =$  \_\_\_\_\_    8.  $m\angle 1 = 19^\circ$ ,  $m\angle 2 =$  \_\_\_\_\_

$\angle 1$  and  $\angle 2$  are *supplementary* angles. Given the measure of  $\angle 1$ , find  $m\angle 2$ .

9.  $m\angle 1 = 52^\circ$ ,  $m\angle 2 =$  \_\_\_\_\_    10.  $m\angle 1 = 76^\circ$ ,  $m\angle 2 =$  \_\_\_\_\_    11.  $m\angle 1 = 19^\circ$ ,  $m\angle 2 =$  \_\_\_\_\_

**Stair Railing:** A stair railing is designed as shown in the figure.

Use the angles identified in the figure to **name two pairs** of the indicated type of angle pair.

25. Complementary angles  $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_     $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_

26. Supplementary angles  $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_     $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_

28. Vertical angles  $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_     $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_

29. Linear pair  $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_     $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_

30. Adjacent angles  $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_     $\angle$  \_\_\_\_\_ &  $\angle$  \_\_\_\_\_

