

# Geometry

## 1.6 Describing Pairs of Angles

### Angle Pairs

#### Adjacent Angles

What is it like?

- Angles that share a \_\_\_\_\_ and \_\_\_\_\_
- Are \_\_\_\_\_ to each other
- Are not \_\_\_\_\_ each other

What are examples?

- \_\_\_\_\_
- \_\_\_\_\_

#### Complementary and Supplementary

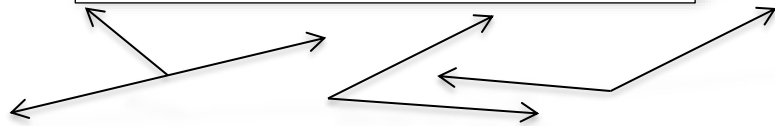
Complementary Angles

- Two angles whose sum is \_\_\_\_\_

Supplementary Angles

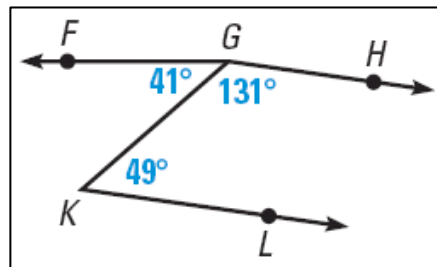
- Two angles whose sum is \_\_\_\_\_

Complementary and Supplementary Angles do \_\_\_\_\_ have to be \_\_\_\_\_



In the figure, name a pair of...

- complementary angles,
- supplementary angles,
- adjacent angles.



Are  $\angle KGH$  and  $\angle LKG$  adjacent angles? Explain.

Are  $\angle FGK$  and  $\angle FGH$  adjacent angles? Explain.

Given that  $\angle 1$  is a complement of  $\angle 2$  and  $m\angle 2 = 8^\circ$ , find  $m\angle 1$ .

Given that  $\angle 3$  is a supplement of  $\angle 4$  and  $m\angle 3 = 117^\circ$ , find  $m\angle 4$ .

$\angle LMN$  and  $\angle PQR$  are complementary angles. Find the measures of the angles if  $m\angle LMN = (4x - 2)^\circ$  and  $m\angle PQR = (9x + 1)^\circ$

**Linear Pair**

What is it like?

- Angles that make a \_\_\_\_\_.
- \_\_\_\_\_ ar pair
- \_\_\_\_\_ angles

What are examples?

- \_\_\_\_\_
- \_\_\_\_\_

**Vertical Angles**

What is it like?

- Angles formed when \_\_\_\_\_.
- On \_\_\_\_\_ sides of the \_\_\_\_\_
- Are not necessarily \_\_\_\_\_ each other

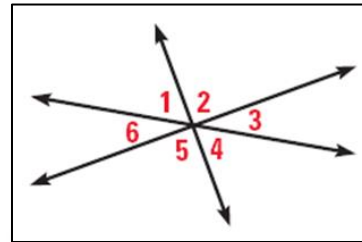
What are examples?

- \_\_\_\_\_
- \_\_\_\_\_

**Vertical Angles are \_\_\_\_\_.**

Do any of the numbered angles in the diagram below form a linear pair?

Which angles are vertical angles?



Two angles form a linear pair. The measure of one angle is 3 times the measure of the other. Find the measure of each angle.

**Diagrams**

**Things you can assume in diagrams.**

Points are \_\_\_\_\_  
 \_\_\_\_\_  
 Lines are \_\_\_\_\_  
 \_\_\_\_\_

**Things you cannot assume in diagrams**

\_\_\_\_\_ unless stated  
 \_\_\_\_\_ unless stated

Assignment: 50 #2, 4, 6, 8, 10, 12, 14, 16, 20, 22, 24, 26, 28, 40, 42, 51, 52, 53, 54, 62 = 20 total