

## Chapter 6 Angle Properties and Straight Lines

### Dear Family,

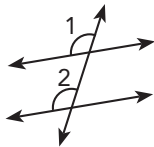
In this chapter, your student will learn about angles formed by pairs of lines. Some of the skills your student will practice are:

- identifying properties of complementary, supplementary, adjacent, and vertical angles
- identifying different types of angles formed by parallel lines and a transversal
- investigating and applying the properties of interior and exterior angles of a triangle

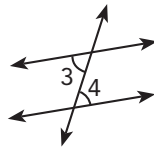
### Activity

Identifying the angles formed by two lines and a transversal is a skill that students will use in classes involving geometry. You can help your student learn this skill with this activity.

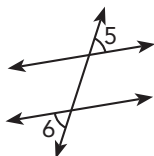
- Draw two parallel lines and a transversal.
- Choose one of the pairs of angles formed, as shown below, and ask your student the name of the pair of angles. You can also use a pair of adjacent angles or vertical angles.



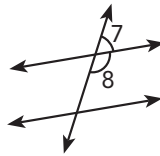
$\angle 1$  and  $\angle 2$  are a pair of **corresponding angles**.



$\angle 3$  and  $\angle 4$  are a pair of **alternate interior angles**.



$\angle 5$  and  $\angle 6$  are a pair of **alternate exterior angles**.

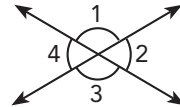


$\angle 7$  and  $\angle 8$  are a pair of **adjacent angles**.

### Vocabulary to Practice

If the measures of  $\angle A$  and  $\angle B$  add up to  $90^\circ$ ,  $\angle A$  is called the **complement** of  $\angle B$ . If they add up to  $180^\circ$ , then  $\angle A$  is the **supplement** of  $\angle B$ .

In the diagram below,  $\angle 2$  and  $\angle 4$  are a pair of **vertical angles**.



When two lines in a plane are intersected by a **transversal**, the angles formed have specific names (see the activity on this page).



### Online Resources

For additional Parent Resources [my.hrw.com](http://my.hrw.com)