## In Exercises 6–11, describe each statement as true or false.

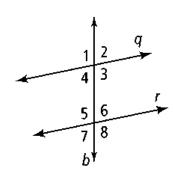
- \_\_\_\_\_1.  $\overrightarrow{AE}$  and  $\overrightarrow{EF}$  are skew lines. \_\_\_\_\_2. plane  $DBF \parallel plane ABD$  \_\_\_\_\_\_3.  $\overrightarrow{GH} \parallel \overrightarrow{EF}$



\_\_\_\_\_4.  $\overrightarrow{DB} \parallel \overrightarrow{AE}$  \_\_\_\_\_5. plane *EFH*  $\parallel$  plane *ABD* \_\_\_\_\_6.  $\overrightarrow{FH}$  and  $\overrightarrow{CD}$  are skew lines.

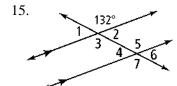
## Identify all pairs of each type of angle in the diagram below right.

- 7. The interior angles are \_\_\_\_\_\_.
- 8. The exterior angles are \_\_\_\_\_\_
- 9.  $\angle 4$  corresponds to  $\angle$ \_\_\_\_.
- 10.  $\angle 4$  is consecutive interior to  $\angle$ \_\_\_\_.
- 11.  $\angle 4$  is alternate interior to  $\angle$ \_\_\_\_.
- 12.  $\angle 2$  is alternate exterior to  $\angle$ \_\_\_\_.
- 13.  $\angle 4$  is linear pair with  $\angle$ \_\_\_ and  $\angle$ \_.
- 14.  $\angle 4$  is vertical to  $\angle$ \_\_\_\_.



## Identify all the numbered angles that are congruent to the given angle. Justify your answers.

16.



\_\_\_\_\_ because \_\_\_\_\_

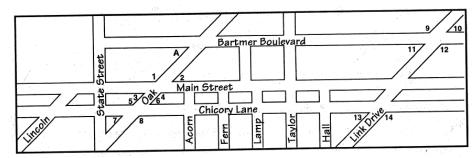
\_\_\_\_\_ because \_\_\_\_\_

∠\_\_\_\_\_ because \_\_\_\_\_

\_\_\_\_\_ because \_\_\_\_\_\_

\_\_\_\_\_ because \_\_\_\_\_

∠\_\_\_\_\_ because \_\_\_\_\_



The streets are a series of parallel lines and transversals. Use the map to answer each request.

- 17. Name five streets that are transversals of Main Street and Chicory Lane.
- 18. Find two pairs of alternate interior angles at the intersections of Oak, Main Street and Chicory Lane.
- 19. Find a pair of consecutive interior angles at the intersections of Oak, Main Street and Chicory Lane.\_\_\_\_\_
- 20. Find a pair of alternate exterior angles at the intersections of Link Drive, Chicory Lane and Bartmer Boulevard.
- 21. If the measure of  $\angle 2$  is 32°, what is the measure of  $\angle A$ . Justify your answer.