

Name _____ Class _____ Date _____

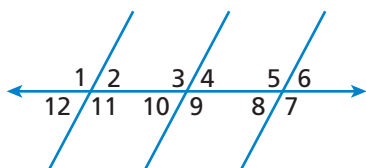
Apply It!



MA.8.G.2.2 Classify and determine the measure of angles, including angles created when parallel lines are cut by transversals.

Parallel and Perpendicular Lines

The figure shows painted lines marking parallel parking spaces in a parking lot. Use the figure for 1–5.



1. Name all the angles that are corresponding angles to $\angle 4$.

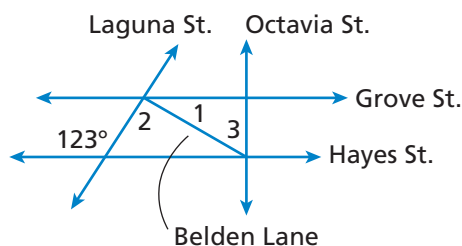
2. What type of angles are $\angle 5$ and $\angle 9$? What can you conclude about their measures?

3. What type of angles are $\angle 3$ and $\angle 7$? What can you conclude about their measures?

4. Name all angles congruent to $\angle 1$.

5. $m\angle 1 = 118^\circ$. Explain how to find $m\angle 10$.

The figure shows several city streets. Grove Street is parallel to Hayes Street. Use the figure for 6–8.



6. Suppose $m\angle 2$ is twice $m\angle 1$. Find $m\angle 1$.

7. Angles 1 and 3 are complementary. Find $m\angle 3$.

8. **Extended Response** Daryl notices that Belden Lane is a transversal that intersects Laguna Street and Octavia Street. He sees that $\angle 2$ and $\angle 3$ are alternate interior angles and he concludes that these angles must be congruent. Do you agree or disagree with his conclusion. Why?
