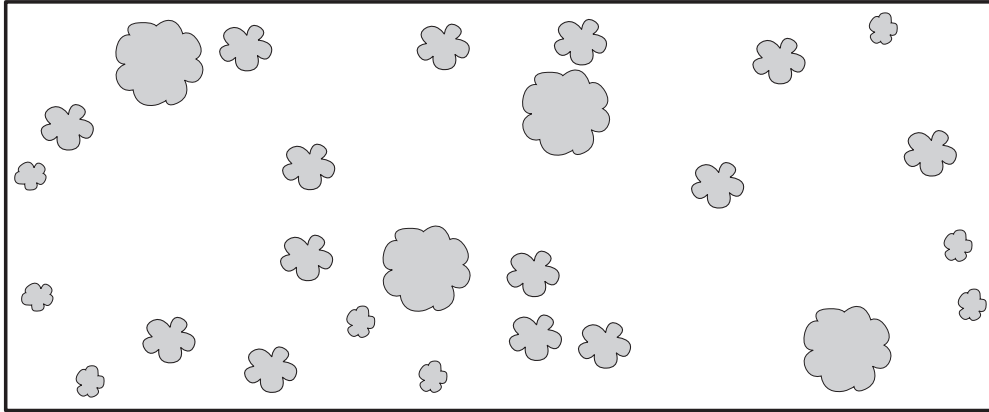


**Application Lesson Opener**

For use with pages 34–42

A diagram of a park is shown below.



1. Members of the city council want to build a sidewalk through the middle of the park. They decide this sidewalk should not go through the park diagonally. What do you think it means to build a sidewalk through the middle of the park? Draw a sidewalk on the diagram above that meets these conditions.
2. After the first sidewalk is built, they decide to build four more sidewalks, one at each of the four corners of the park. They want each corner sidewalk to divide the angle at the corner in half. Draw a sidewalk at each corner in the diagram above that meets these conditions.
3. Do any of the sidewalks you drew in Questions 1 and 2 intersect?
4. Compare your diagram with the diagrams your classmates drew. How are your diagrams the same? How are they different?