**Building Blocks of Geometry** Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Writing Assignment** Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_

Complete each statement with *always*, *sometimes*, or *never* to make a true statement. Then, in complete sentences, explain why this is true. You may find it helpful to provide examples or a counterexample.

1. Skew lines are \_\_\_\_\_\_\_\_\_never\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ coplanar.
2. Parallel lines are \_\_\_\_\_\_\_\_\_\_always\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ coplanar.
3. Skew lines \_\_\_\_\_\_\_\_\_\_\_\_never\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ intersect.
4. Opposite rays \_\_\_\_\_\_\_\_\_\_\_always\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ form a line.
5. Parallel planes \_\_\_\_\_\_\_\_\_\_\_\_never\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ intersect.
6. Two points are \_\_\_\_\_\_\_\_\_\_always\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ collinear.
7. Three points are \_\_\_\_\_\_\_\_\_\_always\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ coplanar.
8. Four points are \_\_\_\_\_\_\_\_\_\_sometimes\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ coplanar.
9. Intersecting lines are \_\_\_\_\_\_\_\_\_never\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ parallel.
10. Intersecting lines are \_\_\_\_\_\_\_\_\_always\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ coplanar.
11. A plane containing two points of a line \_\_\_\_\_\_\_\_always\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_contains the entire line.
12. Two lines \_\_\_\_\_\_\_\_\_\_never\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ meet in more than one point.
13. and  are \_\_\_\_\_\_\_\_\_\_\_\_always\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the same line.
14. and  are \_\_\_\_\_\_\_\_\_\_never\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the same ray.
15. and  are \_\_\_\_\_\_\_\_\_\_\_\_sometimes\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the same ray.