Geometry H: S-A-N Worksheet

1. Two skew lines are _______ parallel.

2. Two parallel lines are _______ coplanar.

3. A line in the plane of the ceiling and line in the plane of the floor are _______ parallel.

4. Two lines in the plane of the floor are _______ skew.

5. If a line is parallel to a given plane, another plane containing that line is _______ parallel to the first plane.

6. Two lines parallel to the same plane are _______ parallel to each other.

7. Two lines parallel to a third line are _______ parallel to each other.

8. Two planes parallel to the same line are _______ parallel to each other.

9. When there is a transversal of two lines, the 3 lines are _______ coplanar.

10. Skew lines are _______ coplanar.

11. Two planes parallel to the same plane are _______ parallel to each other.

12. Two lines skew to a third line are _______ parallel to each other.

13. Two lines perpendicular to a third line are _______ parallel to each other.

14. Through a point outside a plane, there is _______ only one line parallel to the plane.

15. If a line intersects one of two parallel lines, then it _______ intersects the other parallel line.

16. If each of three intersecting lines is skew to a fourth line, then the three lines _______ are coplanar.

17. In the drawing, a plane containing point A is _______ parallel to $BC$. 

18. If line t is skew to line m, there _______ exists a plane that contains line t and is parallel to line m.

19. If line m is skew to line k, there _______ exists a line that is perpendicular to both m and k.

20. If line r is skew to line s, there _______ exists many planes parallel to both r and s.