SchoolNova, Math 5c Homework 14 Introduction to Geometry January 19, 2020

Please provide sufficient details about how you solved the problem. More difficult problems are marked with a *. If unable to solve a problem, please present your thoughts and any partial solution.

1. Find the perimeter of each of the following figures. Organize your results in a table. Try to find a pattern. Next, **predict** the perimeter of the twentieth figure in the pattern.



- 2. In the following figure:
 - (a) Name three points that are collinear.
 - (b) Name four points that are coplanar.
 - (c) Name three points that are not collinear.



- 3. Sketch the following figures (use dashes for hidden part of the figure):
 - (a) A line that intersects a plane in one point.
 - (b) Two planes that intersect in a line.

4. * In the figure below, every line intersects all the other lines, but only two lines pass through each intersection point. Can you draw 5 lines that intersect in this way? 6 lines? Is there a pattern to the number of intersection points?

