Graphing your Neighborhood: Authentic Assessment

**Directions:** Consider your current neighborhood and surrounding areas. There are many different streets and locations to think about! For this assignment, create a map of your neighborhood and the surrounding area.

Make sure to include:

* At least 1 pair of parallel streets. These are streets that run in the same directions with the same “slope”. Display both lines in the same color and include the color and the words “parallel lines” on a key somewhere on the map.
* At least 1 pair of perpendicular streets. These are streets that run in different directions and meet at 90-degree angles. HINT: Most of the time, they intersect at a stoplight or stop sign. Display both lines in the same color and include the color and the words “perpendicular lines” on a key somewhere on the map.
* At least 5 location points. These could identify: your home, a friend/neighbor’s home, a stop sign, a restaurant or store that you frequently go to, or your school. For each location, identify both the name of the item, and the “point” on the graph in (x,y) format. At least 3 of these points should be located on your parallel streets.

Plot the map onto a graph, and labels *all* streets with their corresponding equations, rather than street names (in y=mx+b format). You can use Google Maps as a tool to help you with the assignment.

**RUBRIC:**

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| **CATEGORY** | **4 (Excellent)** | **3 (Great)** | **2 (Fair)** | **1 (Poor)** | **Points Earned** |
| **Neatness and Attractiveness** | Exceptionally well designed, neat, and attractive. Colors that go well together are used to make the map more readable. A ruler and graph paper are used. | Neat and relatively attractive. A ruler and graph paper are used to make the map more readable. | Lines are neatly drawn but the map appears quite plain. | Appears messy and "thrown together" in a hurry. Lines are visibly crooked. |  |
| **Identification of Locations** | All 5 points are plotted correctly and are easy to see. Each point is named and labeled neatly and correctly.  | All 5 points are plotted correctly and are easy to see.  | 4 or fewer points are plotted correctly and easy to identify.  | No points or locations are identified.  |  |
| **Labeling of Equations** | Each street has a clear, neatly written and accurate equation label. | One or more of the streets has an inaccurate or missing equation label. | Three or more of the streets have inaccurate or missing equation labels.  | None of the street are identified with their corresponding equations.  |  |
| **Parallel and Perpendicular Streets** | 2 parallel streets are clearly identified. 2 perpendicular streets are clearly identified. Different colors are used for the pairs and a key is displayed.  | 2 parallel streets are identified. 2 perpendicular streets are identified. The same color is used for both pairs or no key is displayed.  | Less than 2 parallel streets are identified, or less than 2 perpendicular streets are identified.  | No parallel or perpendicular streets are noted.  |  |
| **Total Score** | **/16** |