Geometry Name:\_\_\_\_\_

### **Build A City Project**

#### **Overview:**

For this project, each student will make his or her own street map for a fictional city (you must name your city) using geometric constructions. This city will consist of:

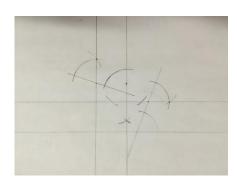
- 1. 2 streets that are parallel to each other.
- 2. 1 road that is perpendicular to the 2 parallel streets.
- 3. 1 avenue that intersects at least 2 streets but is not perpendicular to them
- 4. The following buildings, represented in your city:

Post office School
Bank Restaurant
Fire Department Grocery Store
Police Station Courthouse

Gas Station Your own house

A park

<sup>\*\*</sup>Streets will be made up of two parallel lines and 1 inch apart\*\*



#### **Instructions:**

The objective of this project is for you to demonstrate your understanding of angle pair relationships and your ability to construct parallel and perpendicular lines. Parallel and perpendicular lines will be created using your compass and construction methods. All arcs must be shown on your rough draft to demonstrate your ability. Your rough draft must be submitted for approval to your teacher before beginning the final copy. All buildings will be placed in the following locations:

- 1. Your house and the school at alternate interior angles.
- 2. The post office and the bank at consecutive interior angles.
- 3. The fire department and police station at alternate exterior angles.
- 4. The restaurant and courthouse at alternate interior angles.
- 5. The gas station and grocery store at corresponding angles.
- 6. The park and police station are at supplementary angles.

How to construct parallel lines. How to construct perpendicular lines.

## **Checklist**

- 1. Rough Draft is completed with all arcs intact and check by teacher.
- 2. City has a creative/thoughtful/appropriate name.
- 3. All streets are properly constructed and are clearly named.
- 4. All buildings are in their proper locations. All buildings should be properly labeled and drawn to the best of your ability
- 5. Neatness and creativity. The overall presentation of your city should be neat, fully colored, and appear that sufficient time and effort was put into the project!

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# **Rubric for Project: Parallel lines (Turn in with Project)**

| Student Name:           |   |                      |
|-------------------------|---|----------------------|
| <b>Number of Points</b> | Category                                  | <b>Points Earned</b> |
| 5                       | Rough Draft (with arcs)                   |                      |
| 6                       | Buildings labeled and in correct location |                      |
| 2                       | Streets & City Named Properly             |                      |
| 2                       | Neatness/creativity                       |                      |
|                         | Points Earned:                            | /15                  |