

Geometry Final Project

The goal: To demonstrate your understanding of geometric vocabulary, you will be designing and drawing a town map that incorporates many geometric key terms.

The project should on poster board 11 in by 14 in and larger. It can be drawn by hand, or done on the computer, or even a combination of both.

The rough draft is due: June 1, 2015. The rough draft should NOT have any color, but it should have all of the geometric terms drawn and labeled on the map and the legend.

The final draft is due: June 8, 2015.

Grading Guidelines:

1. Content (30 points)

- All 30 items are included on your map, and they are numbered clearly.
- Position of items demonstrates understanding of the vocabulary terms. Use your Geometry Vocabulary Notes.
- All 30 items should be named on your legend.

2. Creativity (10 points)

Ways to be creative:

- Names (of the town, buildings, streets, etc.).
- Design elements (ex. how you design the map, or a path, or a park).
- Materials (computer-generated images, stickers, etc. are encouraged).
- Use of color (it should be colorful! Try not to have any white).

3. Neatness (10 points)

- Use tools, rulers, stencils, or protractors to make neat lines and angles.
- Write neatly and legibly ~ your best writing. Use pen for the final.
- Correct mistakes so they are hardly noticeable.
- Color well (uniform use of colored pencils looks best; markers should be for titles and outlining only).

Your town must include:

→ A Title at the Top (the name of your town)

→ You must have the NUMBERS labeled on your MAP.

→ You must have the names of the items on your legend.

- 1a –b. Two streets (lines) that are **parallel** to each other.
2. A **diagonal** street (line) that is a **transversal to the parallel** streets.
3. Add two coffee shops that are located in **corresponding angles**.
4. Draw two gas stations that are located in **alternate interior angles**.
5. Add two grocery stores located in **alternate exterior angles**.
- 6a – b. Two streets (lines) that are **perpendicular** to each other.
7. A street that is a **ray**.
8. A street that is a **line segment**.
- 9 a-b. Draw two roads (**line segments**) that are **congruent** to each other. They do not need to be connected or parallel.
10. Draw a round-about in the **midpoint** of a **line segment**.
11. Draw a path or bridge that connects **two complementary angles**.
12. Draw a path or bridge that connects **two supplementary angles**.
13. Draw two parks (**colored green**) at **vertical angles** to each other.
14. Draw a hospital in the shape of a **parallelogram** and put it in the interior of a **90° angle**.
15. Draw a school in the shape of a **trapezoid** that is at an **obtuse angle**.
16. Draw a post office in the shape of a **rhombus** located at an **acute angle**.
17. Draw a courthouse in the shape of a **pentagon** located at a **right angle**.
- 18 a-b-c. Draw three swimming pools, each colored blue: **1 scalene with drain at the orthocenter, 1 isosceles with drain at the incenter, and 1 equilateral with drain at the circumcenter triangle**.
19. Draw a **hexagonal** building (or neighborhood)
20. Draw an **octagonal** building (or neighborhood)
21. Draw a **decagonal** building (or neighborhood)
22. Draw a baseball field with the pitcher's mound at the **centroid**.

Remember – you can add more roads and buildings than those listed above.

Legend (Points of Interest)

- 1a. _____
- 1b. _____
2. _____
3. _____
4. _____
5. _____
- 6a. _____
- 6b. _____
7. _____
8. _____
- 9a. _____
- 9b. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
- 18a. _____
- 18b. _____
- 18c. _____
19. _____
20. _____
21. _____
22. _____

Name _____

Date _____

Grading Rubric for Geometry Map Project

Part One: Content (30 points)

$\frac{\quad}{30}$

- ✓ All 30 items are included and numbered on your map.
- ✓ Items are placed properly.
- ✓ All 30 items are named on your legend.

Part Two: Creativity (10 points)

$\frac{\quad}{10}$

- ✓ Creative names for roads, buildings, and town
- ✓ Map Design (how items are placed on the map)
- ✓ Materials
- ✓ Use of color (it should be colorful!).

Part Three: Neatness (10 points)

$\frac{\quad}{10}$

- ✓ Tools, rulers, stencils, or protractors were used. Lines are straight. Polygons are neat.
- ✓ Writing is very neat and legible.
- ✓ Mistakes are hardly noticeable.
- ✓ Color looks great.

Grand Total:

$\frac{\quad}{50}$

Legend (Points of Interest)

- 1a. _____
- 1b. _____
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6a. _____
- 6b. _____
- 7. _____
- 8. _____
- 9a. _____
- 9b. _____
- 10. _____
- 11. _____
- 12. _____
- 13. _____
- 14. _____
- 15. _____
- 16. _____
- 17. _____
- 18a. _____
- 18b. _____
- 18c. _____
- 19. _____
- 20. _____
- 21. _____
- 22. _____

