What I learned in Geometry Class this Year.

|  | Concept (formula if needed) | Explain in your own words. (What do I understand about this geometric concept?) | Demonstrate the concept. Example or problem |
| :---: | :---: | :---: | :---: |
| 1 | Tools for geometry ( segments, angles, perpendicular bisectors, angle bisector, parallel lines, slopes of parallel and perpendicular lines ) |  |  |
| 2 | Area of regular polygons. |  |  |
| 3 | Four centers of a triangle. (Orthocenter, inceter, circumcenter and centroid ) |  |  |
| 4 | Triangle inequality |  |  |
| 5 | Special right triangles |  |  |
| 6 | Trigonometric Ratios (Sine, cosine and tangent) |  |  |
| 7 | Transformations (dilation, translation, reflection, tessellations, rotation and glide reflection ) |  |  |
| 8 | Surface area of polyhedrons (Lateral and total) |  |  |
| 9 | Volume of polyhedrons |  |  |
| 10 | Effect of dimensional changes using scale factor. ( 1-D, 2-D and 3-D) |  |  |
| 11 | Angles on a circle. |  |  |


| 12 | Segments on a circle. |  |  |
| :--- | :--- | :--- | :--- |
| 13 | Pythagorean Theorem. |  |  |
| 14 | similar triangles |  |  |
| 15 | Inductive and deductive reasoning |  |  |
| 16 | Properties of regular hexagon |  |  |
| 17 | Geometric probability |  |  |
| 18 |  |  |  |
|  | DIRECTIONS: This project will be done individually .You will be graded on <br> completeness, correctness and neatness. |  |  |
| Your final Geometry project is a summary of 18 ideas taken from Discovery <br> Geometry textbook and other resources. |  |  |  |
| You will identify the unit, show and example of how problem using this topic is <br> solved, and then illustrate your topic using an example. |  |  |  |
| You must submit your project on the due date May 11, 2015 before 4PM. <br> Create a power point presentation or excel file. |  |  |  |
| Total value of this project: 20\% of your final exam. (This is part one of your <br> final exam) |  |  |  |

