Name $\qquad$ Date $\qquad$ Pd $\qquad$

## "Point of Concurrency" Project Rubric

This project will be worth a QUIZ grade (80\%) and due on Tuesday, February 6th. Be sure to turn this rubric sheet in with your final project. You will have 4 days in class to work on this. If you turn it in on Friday, February $2^{\text {nd }}$ you can earn 5 bonus points. Signature after each part, per day to earn full credit. Use time wisely.

## Part 1: Problem: 10 points Signature:

Create a real life scenario/problem that would involve needing to find the best point of concurrency in a triangle. Make sure to write your real life scenario/problem in paragraph form and include a pictorial representation. This should be asking a question that you will solve and answer by the end of the project.

## 5 - Problem

5 - Pictorial representation

## Part 2: Constructions: $\mathbf{4 0}$ points Signature:

Use a compass, protractor, and/or ruler to construct your triangle along with the special segment you believe to be the best special segment for your scenario. (Explanation of steps shown or written out.) No isosceles or equilateral triangles allowed.

5 - Triangle (drawn and labeled properly, not isosceles or equilateral, scale ie: 1 in = 10 ft )
30 (10 per special segment) - 3 segments (look for arc marks)
5 - Point of Concurrency (POC)(drawn and labeled properly)

## Part 3: Algebra 1 Review Problems \& CYU's: 50 points Signature:

Complete the problems from the worksheets posted to the website \& put pictures on the slides with work. Problems should be numbered and labeled.
(20) Complete the problems from the worksheets posted to the website (pictures on the slides)
(30) Complete the three CYU's: 6.1 CYU, 6.2 CYU, 6.3 CYU (stapled to this rubric when turned in and filled out in your folder too.)

## Part 4: Algebra Calculations: $\mathbf{2 5}$ points Signature:

Show calculations for all parts needed to write the equation for all three special segments. Provide your thought process to support for your work \& answer.

5 - Per calculation (should be 3)(i.e. midpoint, slopes, perp. slope, equations, etc.)
10 - Solving the system of equations (notation \& labeling)

## Part 5: Conclusion: 15 points Signature:

Show your algebraic work solving for the POC. Then give an explanation of the solution in complete sentences. (Tell what the point of concurrency is that best fits your scenario, what the point represents, provide the coordinate answer, and what special segments were used to locate the specific point.)

## 5 - Accuracy of POC (compare parts 2 \& 4)

10 - Clear explanation (answer questions in part 5 explanation)

## Part 6: Final Product: $\mathbf{2 0}$ points

5 - Google Slide Presentation
5 - all signatures
5 - Organization/layout
5 - WOW factor/creativity

## TOTAL (160 points possible)

Comments:

