

Name REDLIN & NEVEDAL

I. Construct with a compass and straight edge the following nets given the base square of the cube. Label the lengths with the correct dimensions using your given cube length. (44 points)

- 4 (4) One edge of your cubo
8 (8) Net of the pyramid from case 1
16 (16) Net of the prism and pyramid from case 2
16 (16) Net of the tetrahedron and pyramid from case 3

V. NICE!
BE SURE TO SIMPLIFY
YOUR ROOTS
44/44

II. Construct the following using the assigned measurement: (36 points)

- 11.5 (12) Case 1. Three adjacent sides of a cube that make a corner and the pyramid that would be cut out.
11 (12) Case 2. Three adjacent sides of a cube that make a corner and the square prism and one rectangular pyramid
10.5 (12) Case 3. Three adjacent sides of a cube that make a corner and the tetrahedron and square pyramid (3)

III. Write a detailed essay: (80 points)

- 8 (8) Part 1 Title Page & appropriate usage of MLA formatting
6 (6) Part 2 Introduction (Be sure to discuss the cubo, surface area, and volume in your thesis.)
10 (10) Part 3 Explain how you found the length of one edge of your cubo and find the surface area of your assigned cubo (remember it is the surface area of ALL faces)
10 (10) Part 4 Explain how you found the dimensions for your net of the corner pyramid. Carefully explain with drawings and formulas how you found the volume in case 1.
20 (20) Part 5 Explain how you found the dimensions for your net of the square prism and the rectangular pyramid. Carefully explain with drawings and formulas how you found the volume in case 2.
20 (20) Part 6 Explain how you found the dimensions for your net of the tetrahedron and square pyramid. Carefully explain with drawings and formulas how you found the volume in case 3.
6 (6) Part 7 Conclusion (Include any problems that you encountered.) Be sure to discuss why you should have the same volume for each of the three different methods.
+9 (10) Extra Credit: Make your cubo with some theme
+5 (5) Extra Credit: Complete and turn in the project by Friday, February 28th, 2014

17 TOTAL (160 points)

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