Names: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Optimization Cost Project**

The custodial staff at CB South needs to create 3 equal sized storage pens for landscaping materials (such as stone, mulch, and dirt). The pens need to be open on one end for easier accessibility. The total area for all three storage pens needs to be 1200 ft2. The outside fence needs to be made from a wood material; the inside fence needs to be of a non-wood material. With a partner, you need to find the dimensions that will minimize the cost of the fencing material. Each group will present their solution to a member of the custodial staff, who will then choose a winner.

Each Presentation must include:

* A drawing showing the dimensions and material for each part of the storage pens
* All the calculations used to find your solution
* A description of the materials selected and where they are from
* A total cost for the project
* Reflection on project. Describe the most difficult/ challenging part of the project

**Drawing:** *5 points*

**Materials:** *6 points*

Outside material:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Outside material cost/ft2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Store outside material found at: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Inside material: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Inside material cost/ft2:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Store inside material found at: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Calculations:** *(10 points)*

**Reflection:** *5 points*

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