SLO #3: Compute the area and perimeter of geometric figures.

3.1 Major Assignment: Project & Presentation
   Assessment method: Rubric

Project:

Assume that you are remodeling your house.

1) Include the floor plan showing floor dimensions and wall height, bathroom, kitchen and minimum of two bedrooms.
2) Carpet, hard wood or tile the floors. Show all your steps in calculating the areas and the cost.
3) Prime and Paint the walls. Show all the steps in calculating the amount of primer and paint and the cost of each.
4) Install baseboard. Show all your work in calculating the perimeters and the cost of baseboard.
<table>
<thead>
<tr>
<th>Score</th>
<th>Clarity and reasonableness of picture</th>
<th>Areas calculated</th>
<th>Perimeters calculated</th>
<th>Amount of material for covering floors</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>The floor plan shows all different rooms, kitchen, bathroom, and hall ways are reasonable sizes the overall scale is correct, and the walls' heights are correct</td>
<td>The area of each room, kitchen, bath room, hall ways and overall area are calculated correctly</td>
<td>The perimeter of each room, kitchen, bath room and the hall ways are calculated correctly</td>
<td>The amount of materials for covering the floors of the rooms, kitchen, bathroom, and the hallways are calculated correctly</td>
</tr>
<tr>
<td>3</td>
<td>There is a slight error in drawing the floor plan, scale or the walls' heights</td>
<td>The area of one room, kitchen, bath room or the hall ways is being calculated incorrectly</td>
<td>The perimeter of one room is calculated incorrectly</td>
<td>The amount of materials for covering the floor of one room, kitchen, bathroom, and the hallways is being calculated incorrectly correctly or there is a slight error in overall calculation of materials for covering floors</td>
</tr>
<tr>
<td>2</td>
<td>There are some rooms, kitchen or bathroom are not being included in the floor plan, or scale is all wrong or the walls' heights are drawn incorrectly</td>
<td>The areas of two parts of the floor plan (ex. a room and the kitchen) are being calculated incorrectly</td>
<td>The perimeter of two parts of the floor plan (ex. a room and the kitchen) is calculated incorrectly</td>
<td>The amount of materials for covering the floor of two rooms, including kitchen, bathroom, and the hallways is being calculated incorrectly or there is an error in overall calculation of materials for covering floors</td>
</tr>
<tr>
<td>1</td>
<td>The floor plan does not show different rooms, the scale is wrong or the walls' heights are not included</td>
<td>The areas of three or more room (including kitchen, bathroom) calculated incorrectly</td>
<td>The perimeter of three or more room (including kitchen or bathroom) calculated incorrectly</td>
<td>The amount of materials for covering the floor of three or more rooms, including kitchen, bathroom, and the hallways is being calculated incorrectly or there is a substantial error in overall calculation of materials for covering floors</td>
</tr>
<tr>
<td>0</td>
<td>The floor plan is not included in the project</td>
<td>The areas are not calculated</td>
<td>The perimeters are not calculated</td>
<td>The amount of Floor covering materials is not being calculated</td>
</tr>
<tr>
<td>Amounts of materials for the wall coverings</td>
<td>The amount of primer and paint/s to cover the walls of the rooms, kitchen, bathroom and the hallways calculated correctly</td>
<td>There is a slight error in calculating the surface area or the cost of primer or paint</td>
<td>One of the materials (primer or paint) is not being calculated while the other one is being calculated correctly</td>
<td>There is a substantial error in calculating the surface area or the cost of primer or paint or the amount of primer or paint is not being calculated</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Amount of base board</td>
<td>The amount of the baseboards for the rooms, kitchen, bathroom and the hallways is calculated correctly</td>
<td>There is a slight error in calculating the amount of baseboard for one room but the rest is correct</td>
<td>The amount of baseboard for two rooms including kitchen or bathroom is being calculated incorrectly</td>
<td>There is a substantial error in the calculation of the amount of baseboard for three or more room or overall calculation</td>
</tr>
</tbody>
</table>
**Flooring:**

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Model &amp; Internet Numbers</th>
<th>Price/Unit</th>
<th>Case Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>TrafficMaster Putty Ribbed 18 in. x 18 in. Carpet Tiles</td>
<td>CP44V2616PK, 202042001</td>
<td>$0.99/Sq. Ft.</td>
<td>$35.64/Case</td>
</tr>
<tr>
<td>(16 Tiles/Case)</td>
<td></td>
<td></td>
<td>Covers 36 Sq. Ft.</td>
</tr>
<tr>
<td>Shaw Loop Viking Buckwheat 12 Ft. W Carpet</td>
<td>0701649725, 326686, 245121</td>
<td>$4.86/Square yard</td>
<td></td>
</tr>
<tr>
<td>MARAZZI Montagna Soratta 12 in. x 12 in. Glazed Porcelain</td>
<td>UG93, 100645904, 377523, 829568</td>
<td>$1.68/Sq. Ft.</td>
<td>$25.20/Case</td>
</tr>
<tr>
<td>Floor &amp; Wall Tile</td>
<td></td>
<td></td>
<td>Covers 15 Sq. Ft.</td>
</tr>
</tbody>
</table>
### Pergo Presto Salem Oak Laminate Flooring

8mm Thick x 47-1/2 in. Length x 7-5/8 in. Width  
Model # 04700  
Internet # 100496275  
Store SKU # 109685  

- **$1.97/Sq. Ft.**  
- **$39.60/CA-Case Covers 20.1 Sq. Ft.**

**Primer:**  
Each gallon of primer covers 400 \( ft^2 \) of a surface area

### KILZ 2 LATEX Gallon White Pigmented Interior/Exterior Water-Based Sealer-Primer-Stainblocker

Model # 20001  
Store SKU # 140770  

- **$15.48/EA-Each**

### KILZ 2 LATEX 2 Gallon White Pigmented Interior/Exterior Water-Based Sealer-Primer-Stainblocker

Model # 20005  
Store SKU # 317390  

- **$19.97/EA-Each**
<table>
<thead>
<tr>
<th>Product Name</th>
<th>Model #</th>
<th>Store SKU #</th>
<th>Price/Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>KILZ 2 LATEX 5 Gallon White Pigmented Interior/Exterior Water-Based Sealer-Primer-Stainblocker</td>
<td>20000</td>
<td>299237</td>
<td>$67.97</td>
</tr>
<tr>
<td>BEHR PREMIUM PLUS ULTRA 1-Gallon Flat Interior Paint and Primer</td>
<td>175001</td>
<td>909921</td>
<td>$30.98</td>
</tr>
<tr>
<td>BEHR Premium Plus 1-Gallon Flat Interior Paint</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Paint:**
Each gallon of primer covers 250 $ft^2$ of a surface area
**Baseboard:**

1) Kelleher 3-1/4 in. x 9/16 in. MDF Base Moulding  
   Model MDF221A  
   $0.85/LF-Linear Foot

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**BEHR Premium Plus 1-Gallon Flat Interior Paint**  
Model # 105001  
Store SKU # 135992  
$19.97/EA-Each

**BEHR Premium Plus 5-Gallon Flat Interior Paint**  
Model # 105005  
Store SKU # 136433  
$89.00/EA-Each

**BEHR PREMIUM PLUS ULTRA 5-Gallon Flat Interior Paint and Primer**  
Model # 175005  
Store SKU # 910053  
$139.00/5-Gallon
2) Kelleher 3-1/4 in. x 9/16 in. Coronado Base, Primed Pine, Moulding
   Model P221PR16L
   $1.18/LF-Linear Foot

3) Kelleher 3-1/4 in. x 9/16 in. Primed Pine Coronado Base Moulding
   Model P221
   $1.88/LF-Linear Foot