Room Redecorating

Standards

Content

Students will be able to…
- Apply mathematical knowledge to real world situations
- Apply mathematical knowledge to solve problems
- Find the area of polygons

Process

Students will be able to…
- Demonstrate effective writing skills

Task Description and Criteria

You just bought an old house and you have decided to redecorate one of the rooms. However, you have a budget you need to stick to of $2000. You will definitely need new flooring and wall covering. Any money left over is to be spent on new furniture or decorations. How you choose to redecorate the room is up to you. You will use paint for the walls and choose carpeting or hard wood for the floors. The layout of the room is up to you, but you will need to draw a floor plan for me with the dimensions clearly marked. Don’t forget about the windows and doors, those dimensions are just as important even though they are not being covered.

A couple things to keep in mind about paint and flooring:
- For the walls, you need one coat of primer and two coats of paint
- For a carpeted floor, you need to buy padding

1 gallon of paint covers 400 square feet
1 gallon of primer costs $12.95
1 gallon of paint costs $15.56
Carpet costs $12 per square yard
Padding costs $5 per square yard
Hard wood floors cost $8 per square foot

You will calculate how much it will cost you to cover the walls and floor, and then if there is money remaining use magazines or the internet to find furniture and decorations. Anything you want to buy needs to be cut out or printed with a picture and price.

Make sure your calculations are accurate and do not go over your budget!
Use this calculations guideline

Paint color chosen: ______________
Area of the walls: ______________
Primer cost: ______________
Paint cost: ______________

Flooring chosen: ______________
Area of the floor: ______________
Flooring cost: ______________

Total cost of walls and floor: _____________________________

How much money do you have left over: __________________

Cost of furniture and decorations: _________________________

How much money is left over: ____________________________

Your grade will be based on the following criteria:

- Floor plan is drawn neatly with all dimensions labeled
- Area of the walls is correct
- Area of the floor is correct
- Cost of paint is correct
- Cost of flooring is correct
- Colors of paint and flooring chosen are included
- Money left over is correct
- Pictures and prices included for furniture and decorations
- Drawing of the room included, colored, and neat
## Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Unacceptable (0 pts)</th>
<th>Poor (2 pts)</th>
<th>Good (4 pts)</th>
<th>Excellent (6 pts)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floor plan</td>
<td>No floor plan included</td>
<td>Floor plan has some, but not all dimensions labeled</td>
<td></td>
<td>Floor plan has all dimensions labeled</td>
</tr>
<tr>
<td>Wall Area</td>
<td>Not correct with no work shown</td>
<td>Did not subtract out windows and doors</td>
<td>Minor errors in calculations</td>
<td>Correct with all work shown neatly</td>
</tr>
<tr>
<td>Floor Area</td>
<td>Not correct with no work shown</td>
<td>Did not subtract out base of door</td>
<td>Minor errors in calculations</td>
<td>Correct with all work shown neatly</td>
</tr>
<tr>
<td>Paint Cost</td>
<td>Not correct</td>
<td>Many errors in calculations</td>
<td>Few errors in calculations</td>
<td>Correct with all work shown neatly</td>
</tr>
<tr>
<td>Floor Cost</td>
<td>Not correct</td>
<td>Many errors in calculations</td>
<td>Few errors in calculations</td>
<td>Correct with all work shown neatly</td>
</tr>
<tr>
<td>Colors and Type of Flooring</td>
<td>Not included</td>
<td>Included</td>
<td>Included</td>
<td></td>
</tr>
<tr>
<td>Money Left Over</td>
<td>Not included</td>
<td>Included but not accurate</td>
<td>Included and accurate</td>
<td></td>
</tr>
<tr>
<td>Furniture and Decorations</td>
<td>Not included</td>
<td>Included with pictures but no prices</td>
<td>Included with pictures and prices</td>
<td></td>
</tr>
<tr>
<td>Budget</td>
<td>Over budget</td>
<td></td>
<td></td>
<td>Under budget</td>
</tr>
<tr>
<td>Drawing of Redecorated Room</td>
<td>Not included</td>
<td>Drawing is neat but not colorful or detailed</td>
<td>Drawing is neat, colorful, and detailed</td>
<td></td>
</tr>
</tbody>
</table>

Total:  / 50 points