

Performance Task (Option One – Quilting)

You are a quilter, and you and your fellow quilters have been asked to create a patterned quilt for a quilting kit for a craft company. Your quilt must contain at least three different quadrilaterals, but other polygons may be included as well; you must create a colorful representation of your quilt (using whatever materials you desire) so that the executives of the craft company have an understanding of what the finished quilt will look like. You must calculate the area of each of the polygons you use in order to determine how much fabric of each color or design will be used in the quilting kit; use this information to determine how much the quilt will cost in total. This information should be displayed in a spreadsheet for presentation to the craft company executives. Your final presentation, which will be presented to the class, should include a partial or full depiction of the quilt, accurate dimensions and areas of each quadrilateral or other polygons, and accurate material costs. Your quilt may be designed for any skill level and any standard bed size.

Steps to follow:

1. Design a visually appealing quilt/tile floor that is to particular dimensions of your choosing.
2. Include at least THREE **different** types of quadrilaterals in your design (you may use more than three, and you may use other polygons). Having two shapes of the different dimensions does not count as having two different shapes.
3. Make a scale representation of your entire design, OR make a section of the design if it repeats.
4. Calculate the area of each quadrilateral to determine how much of each material you will need. Display this information in a spreadsheet.
5. Present your design and its cost to the executives (your classmates) of the company that wants to buy it!

My group members are _____

This project is due on _____.

Performance Task (Option Two – Tile Design)

You are a tile mason, and your contracting company has been asked to design a pattern for the floor in the entrance hall of a new school. Your floor design must contain at least three different quadrilaterals, but other polygons may be included as well; you must create a colorful representation of your design (using whatever materials you desire) so that the principal of the school has an understanding of what the finished floor will look like. You must calculate the area of each of the polygons you use in order to determine how many tiles of each color or design will be used in the floor design; use this information to determine how much the floor will cost in total. This information should be displayed in a spreadsheet for presentation to the school principal. Your final presentation, which will be presented to the class, should include a partial or full depiction of the design, accurate dimensions and areas of each quadrilateral or other polygons, and accurate material costs. Your floor design can include tiles of any dimension and must cover an area of at least 100 square feet.

Steps to follow:

1. Design a visually appealing quilt/tile floor that is to particular dimensions of your choosing.
2. Include at least THREE **different** types of quadrilaterals in your design (you may use more than three, and you may use other polygons). Having two shapes of the different dimensions does not count as having two different shapes.
3. Make a scale representation of your entire design, OR make a section of the design if it repeats.
4. Calculate the area of each quadrilateral to determine how much of each material you will need. Display this information in a spreadsheet.
5. Present your design and its cost to the executives (your classmates) of the company that wants to buy it!

My group members are _____

This project is due on _____.