

Stained Glass Window



The purpose of this project is to use linear equations to design a stained glass window. Students will include lines with zero, undefined, positive and negative slopes. The skills of graphing and writing linear equations will be used to create your stained glass window.

Procedure:

1. Start with a piece of graph paper. (I have extras if needed).
2. Create a stained glass window design by drawing *at least 16 lines* on graph paper. Use all types of slope: positive, negative, zero, and undefined. Extend the each line past the edge of the grid paper.
3. Number each line. Next to the number, label each line with its equation; write it legibly next to the line, outside the window. Write the 16 equations of the lines you used in slope-intercept form ($y = mx + b$). (SEE EXAMPLE) *To earn more points, add more than 16 lines.*
4. Color **each** section of the window. Be careful that the equations of the lines are still visible on the graph. Use colored pencils, markers, paint, glitter, colored paper, tissue paper, iPad, etc..., to make the stained glass window unique and beautiful. *For more points be more creative* – you could even cut out your pieces and make it a true window!
5. Mount your stained glass window on a piece of larger color paper, construction paper or small poster board.
6. Attach the rubric to the back of the finished product. Make sure to include your name & period number!

DUE: Friday, December 6th

Name _____

Period _____

Stained Glass Window Project

Grading Rubric

Category	0 points	1 point	3 points	5 points	Total Earned
Equations 1-16	Incorrect/Not plotted correctly at all	y-intercept plotted correctly	Slope & y-intercept plotted correctly	All parts correct and extends	
Equations 1-16	None of the lines or equations are labeled	few are labeled	most are labeled	All 16 lines and equations are labeled	
Slopes represented	Only one type of slope represented	Only two types of slopes represented	Only three types of slope represented	All four types of slopes represented	
Color	Window has little to no color	Window has some color but is messy	Window has color throughout but is messy or monotone	Window has full color	
Neatness	Window is sloppy/lines are not straight	Window has straight lines for the most part but does not look neat	Window has straight lines and is mostly neat	Window has all straight lines and is very neat throughout	
Grade = subtotal x 4					
BONUS POINTS	-Extra Lines have been Graphed -Extra supplies have been used -ABOVE AND BEYOND				

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