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## Chapter 4 \& 5 Stained Glass Graph Project

STEP 1: Choose 3 equations from each box to graph. *You may want to change which equations you are doing as you go.

| $x=11$ | $y=10$ | $y=2 x+18$ | $y=\frac{-4}{5} x-9$ |
| :--- | :--- | :--- | :--- |
| $x=3$ | $y=-12$ | $y=\frac{1}{2} x+12$ | $y=-2 x+10$ |
| $x=-4$ | $y=3$ | $y=x+5$ | $y=-x+9$ |
| $x=-1$ | $y=-5$ | $y=\frac{2}{3} x+19$ | $y=\frac{-1}{3} x+5$ |
| $x=7$ | $y=\frac{1}{4} x-5$ | $y=-4 x-10$ |  |
|  |  | $y=\frac{2}{5} x+16$ | $y=\frac{-1}{2} x+4$ |

## STEP 2:

For each equation, choose 4-5 $x$-values to input into the equation to find $y$-values. SHOW WORK on the back side of this paper.

- Hint: For " $x=$ " equations, all the $x$-values will be the same, but the $y$-values will be different.
-     * Hint: For " $y=$ " equations, all the $y$-values will be the same, but the $x$ values will be different.


## STEP 3:

Once you have the $x$ - and $y$-values for an equation, graph it on the coordinate grid in pencil. You may want to graph after you finish each equation, so that you can see your progress on your design.

## STEP 4:

On a piece of binder paper, write about two lines and equations that intersect. Describe the similarities and differences in growth and points of these two lines.

## STEP 5:

COLOR!!!! All stained glass windows have a variety of color!


