## READ THIS WHOLE PAGE!!!

$\square$ Go to the last page of your binder. Label this page "Week 2 Warmups"
$\square$ Label today's warmup with either "Monday" or today's date.
$\square$ You will do all the warmups from this week on this page. You will need to hold on to this page all week and turn it in on Friday.
$\square$ If you always keep your warmup page as the last page of your binder, it will be easy to find every day!!!

Created by Mr. Lischwe

## Warmup 8/(6--6)

1) Below is the $\mathbf{1 0}$ by $\mathbf{1 0}$ square from the border problem. Try to remember all of the different methods to count them, and make a sketch for each method. One method has been given to get you started.


One possible method:


How would you calculate the number of border squares in a 30 by 30 square using each method?

| 1 | -8 | 1 |
| :---: | :---: | :---: |
| 8 |  | 8 |
|  |  |  |
| 1 | 8 | 1 |



## \#2 - 7: MATCHING

Below are six different methods of calculating the number of shaded border squares in a 10 by 10 grid. Match each method to the appropriate expression.

A) $4 n-4$
B) $4(n-2)+4$
C) $2 n+2(n-2)$
D) $4(n-1)$
E) $n^{2}-(n-2)^{2}$
F) $\mathrm{n}+(\mathrm{n}-1)+$
$(n-1)+(n-2)$


Since this was a 10 by $10, ~ " ~ n " ~ i s ~ 10 ~ i n ~ t h i s ~ c a s e!!!~$
$2 n+2(n-2)$
4n-4
$n+(n-1)+(n-1)+(n-2)$


## Go over Lischwe Age Problem

## One more pattern...




Step 2


Step 3


Step 4

## Group Project: Patterns Poster

You will start by working on a pattern individually. You will attempt to answer all the questions on the front of your sheet. There are several different patterns. After you have had time to work individually, I will put you with your group. (Which is not your table!)

## COMPLETE, INDIVIDUALLY:

1. Draw step 5 and count how many units (squares, circles, etc.)
2. Draw a "quick sketch" of step 13 and calculate how many units
3. Complete the chart:
4. Write an expression.

| Step | Units |
| :---: | :---: |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |
| 13 |  |
| 40 |  |

## EXPECTATIONS FOR WORKING IN GROUPS

(Poster)

## Posters

-You will get your poster paper once I approve:

- Your T-chart on the worksheet
- Your "step 13" sketch
- Your expression
-This is not due tomorrow - you will get more time in class to work on it


## SEL TODAY:

-Go to the Meigs website (meigsacademicmagnet.org) and find the green " $8{ }^{\text {th }}$ Grade SEL Survey" button. Complete the survey.
-You may use your device, but you must put it away when you are done unless you are letting another student borrow it.
-When you are done with the SEL survey, you may continue on your mandala project.

