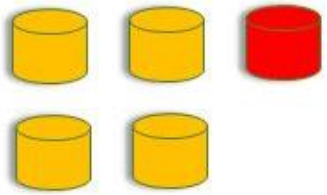
PLEASE READ!!!

- **Partner up with someone at your table.**
- **If you have a 3-person table, I will put one of you with someone from another 3-person table.**
- **Each pair should have one whiteboard, marker, and eraser. (They should already be inside one of your desks)**
- **You will work together to complete the warmup on this whiteboard.**
- ***Also, if you completed a job application, please turn it in to the tray now!!!***
- ***If you did not fill out a job application, please put it back in the pile on my desk.***

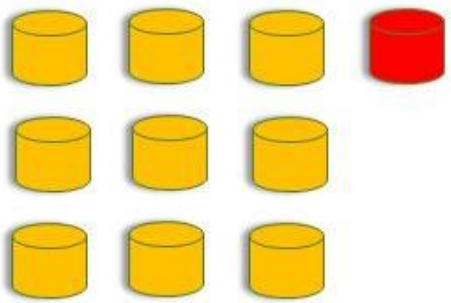
Warmup $8/(9320 \div 932)$

1. **Draw the next step (step 4). How many cylinders are there?**
2. **How many cylinders would be in step 40?**
3. **Make a "quick sketch" of step 40. (you don't have to draw all the cylinders!)**
4. **If "n" is the step number, write an expression that gives the number of cylinders in step "n".**

Step 1

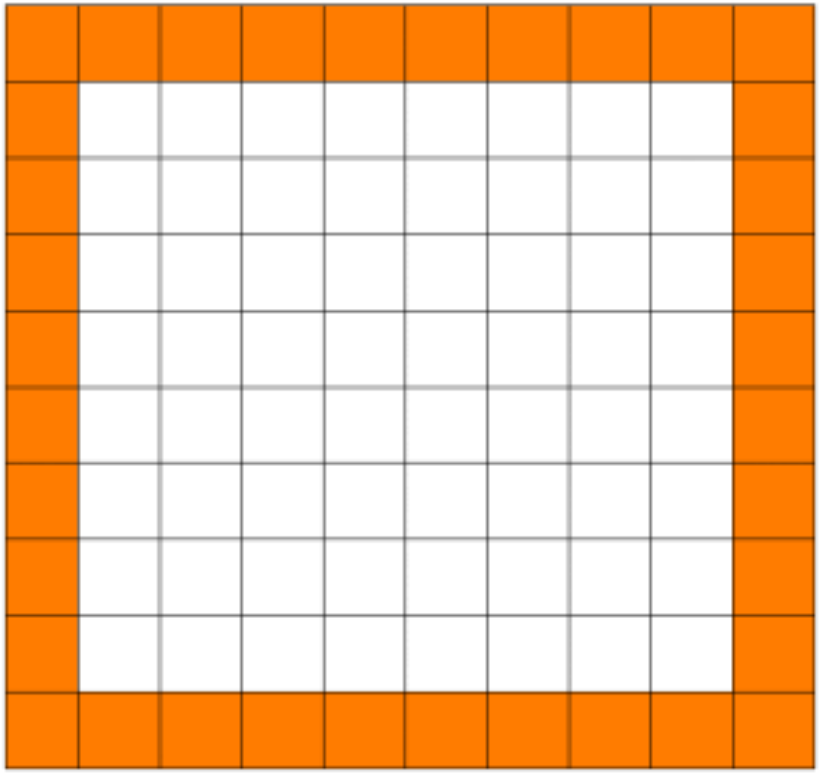


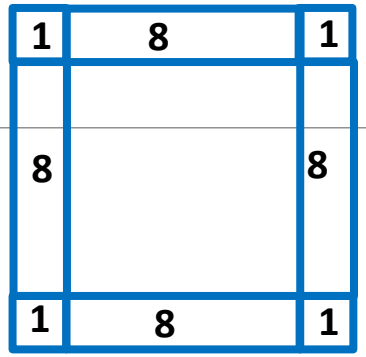
Step 2

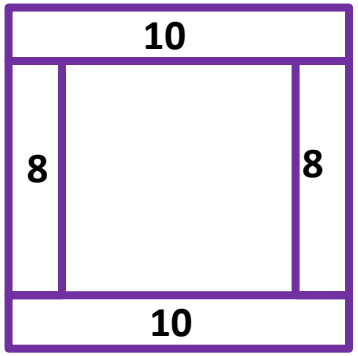


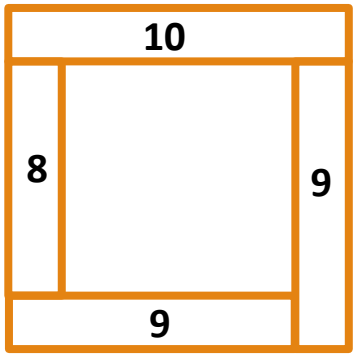
Step 3

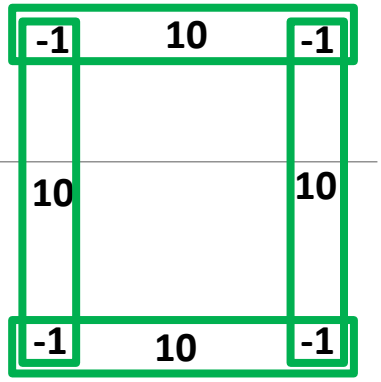
Methods of counting the border squares…

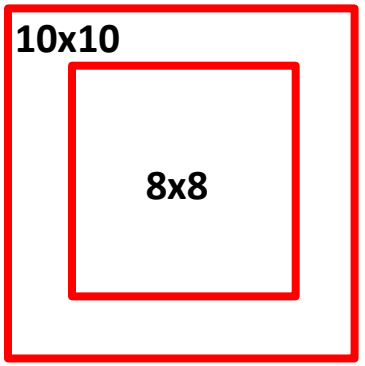


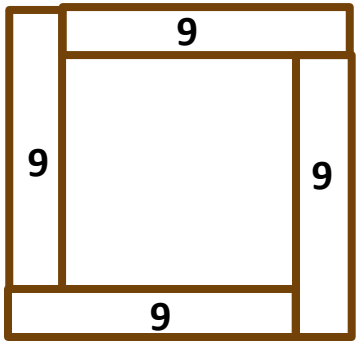












WHITEBOARDS EXPECTATIONS

1. Homeroom will get the whiteboards, and sixth period will put them away. Every class besides sixth will put the whiteboards, markers, and erasers INSIDE THEIR DESKS for the next class.
2. YOU MAY NOT doodle/write random things on the whiteboards. Only use the markers for the actual math we are doing. This makes the markers last longer.
3. Any time we do whiteboards in PAIRS, I expect you to take turns writing. If you are not the one writing, you do not get a “break” – you still need to participate just as much.

On your whiteboards…

With your group, determine how many shaded border squares there would be in a 30 by 30 square.

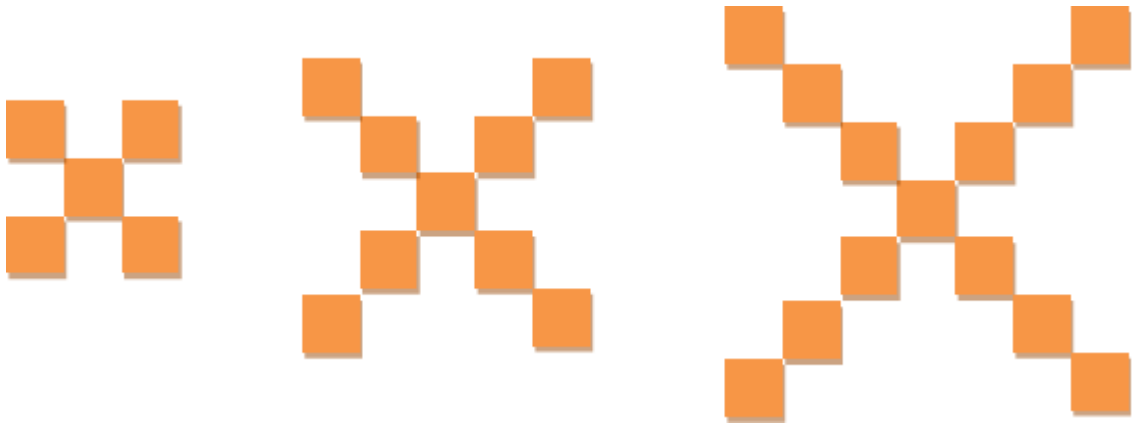
- Draw a picture that shows how you calculated the number of squares.

- **If "n" is the number of squares on each side, write a formula that gives the number of border squares.**

Draw the next step. How many squares are there?

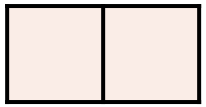
How many squares would step 40 have? (With picture!!!)

Expression using “n”?

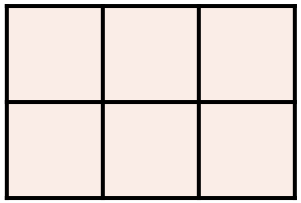


Step 1 Step 2 Step 3

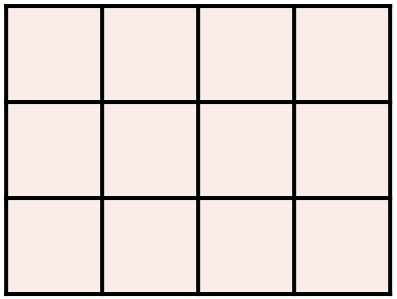
Another pattern



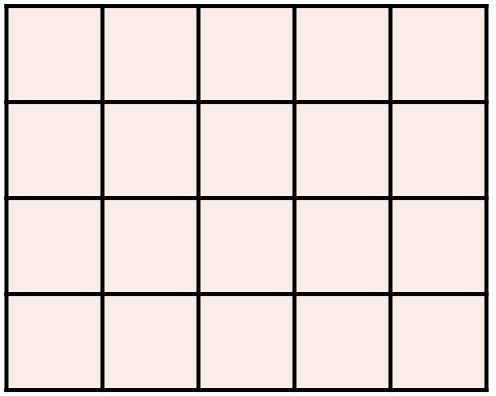
Step 1



Step 2



Step 3



Step 4

Draw the next step. How many squares are there?

Step 40? (With picture!!!)

Expression using “n”?

Homework (Due Tuesday)

Visual Patterns Worksheet