

MATH NIGHT

BHS Mathematics Department

Agenda

- Welcome and introductions
- Let's do some math!
- A view of our classrooms
- Course progression
- A parent's perspective
- Math support
 - Homework help
 - Tutoring
 - Website
- ❖ We are not taking questions orally. Please write any questions/concerns you have on the Question Form and we will answer as many general questions as possible at the end of the night and contact you directly regarding specific questions.

Tonight's Objectives

- Provide information to parents/guardians about the math program at BHS
 - Have a sense of the BHS math classroom
 - Understand the BHS math department's larger educational goals
 - Know about resources and how to access them
 - Have concrete ways to support students in learning math
- Teachers and families who participate will have a positive experience

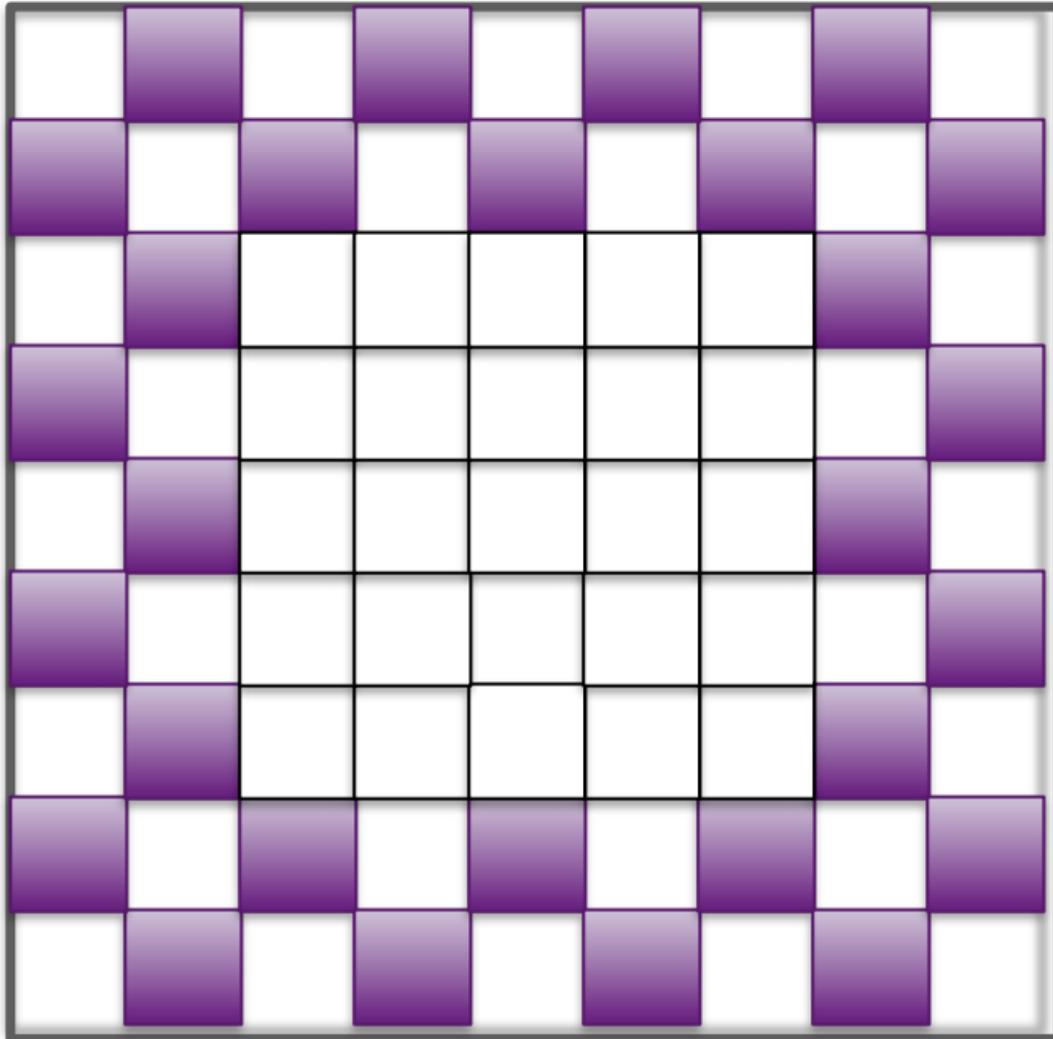
Let's Do Some Math!

This problem is from Math 1, Module 1

1.1 Checkerboard Borders

A Develop Understanding Task

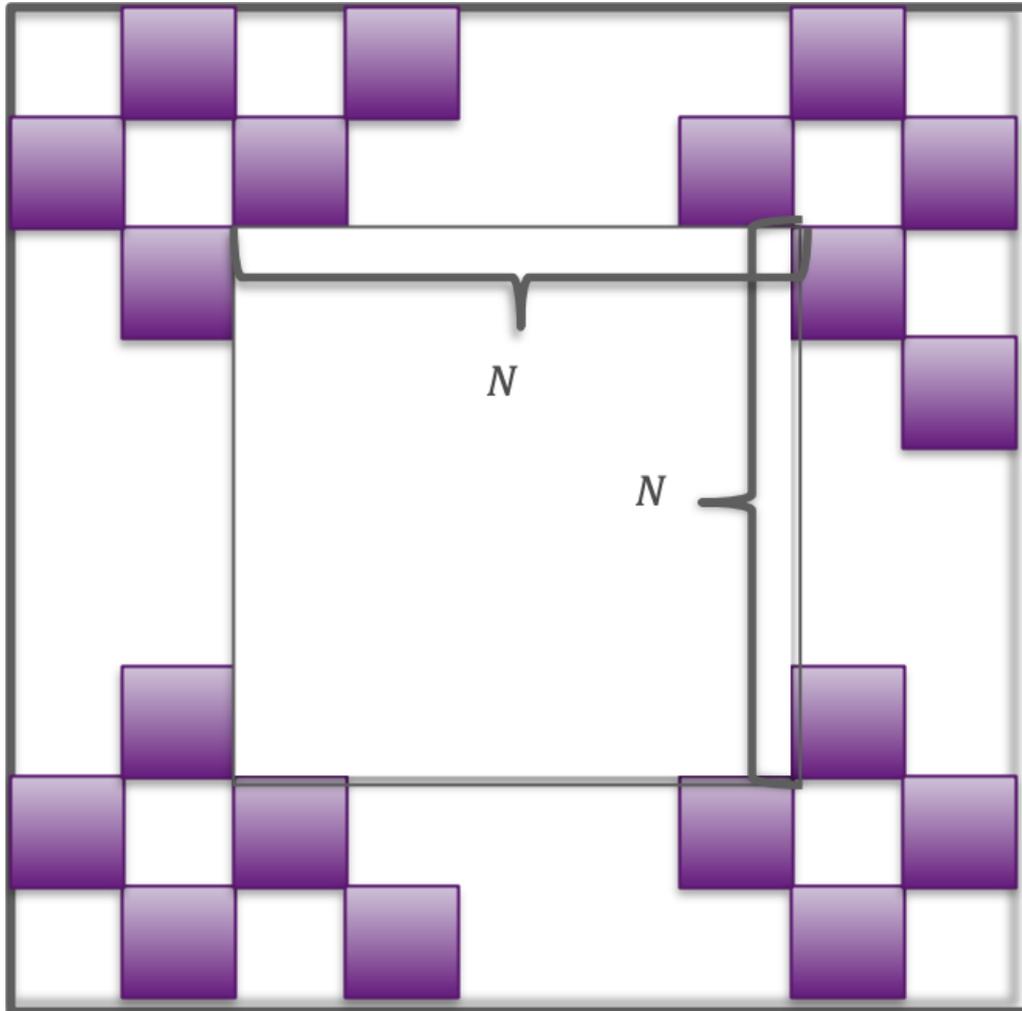
How many colored tiles are in the checkerboard border?



Find a strategy for counting the colored tiles efficiently.

Be prepared to share your idea and justify your work!

How many colored tiles are in this border that surrounds an $N \times N$ square?



Find a strategy for counting the colored tiles efficiently.

Be prepared to share your idea and justify your work!

The Math Department

- There are 23 teachers in the Mathematics Department. As a group, we have...
 - Over 400 years of teaching experience
 - Over 300 years of teaching experience at BHS
 - All been certified by the state of California as math teachers
 - 22 degrees in mathematics and other STEM fields
 - 16 degrees in education
 - Teachers who regularly present at professional conferences
 - Teachers whose work has been published in professional journals
 - 2 National Board Certified teachers
 - 10 teachers who came to teaching as a second career
 - Musicians, a Level 10 gymnastics judge, a state champion curler, a teacher of the year, writers, BHS graduates, scientists, computer programmers, outdoor educators, sports coaches, textbook writers, parents of BUSD students...
- We are experts at what we do!

Standards vs. Curriculum

Common Core Standards for Mathematics

- A set of standards that dictate what is taught in grades K – 12
- Different than the previous set of standards because they include fewer topics that go more in depth
- Suggest what to teach, not HOW to teach it
- State mandated

Curriculum

- A Common Core Standards-aligned curriculum (like MVP) provides a structure for HOW to teach the standards
- We chose the MVP curriculum through a thoughtful trial process

Common Core Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

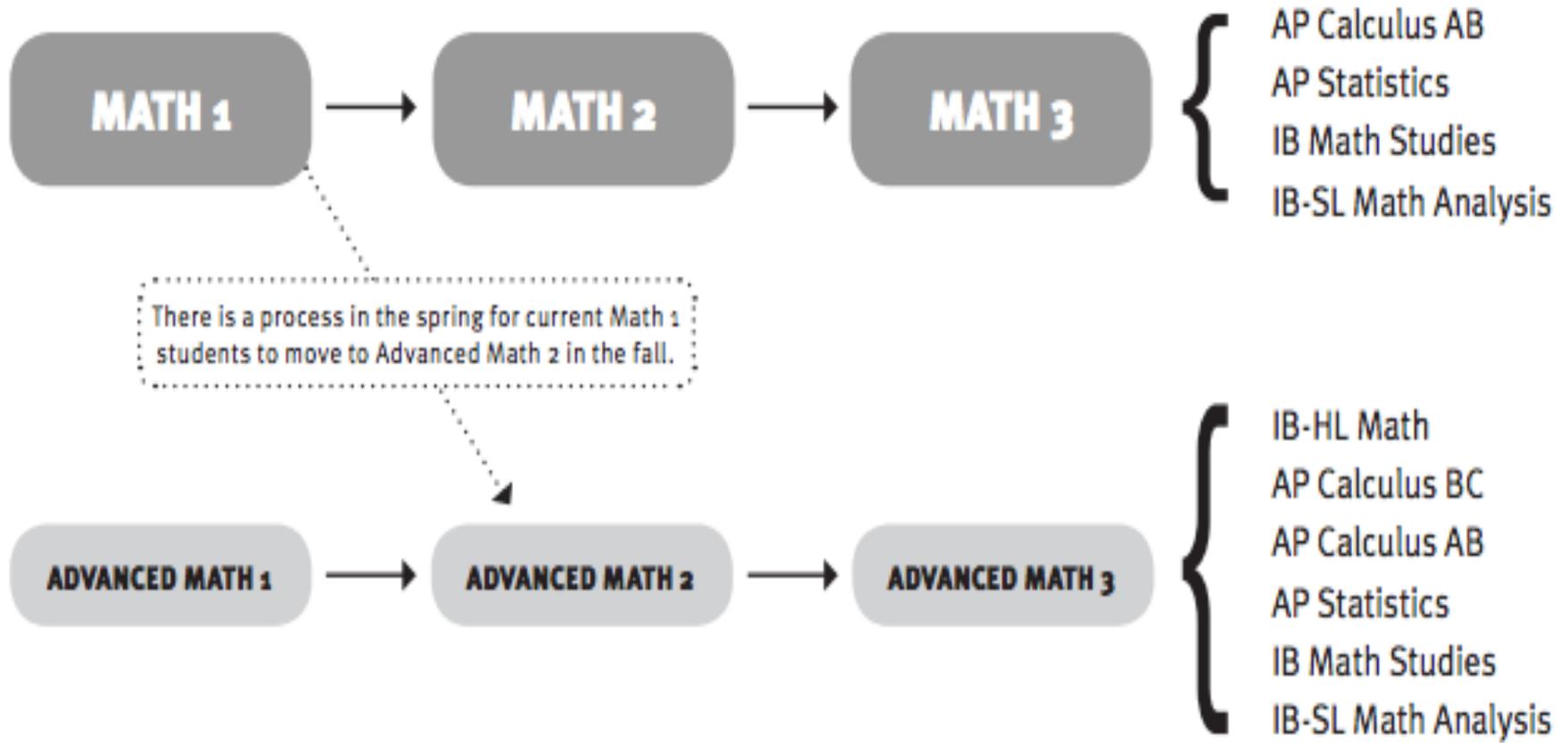
An MVP Classroom looks like...

- Group tasks
- Discovering patterns
- Discussion
- Generalizing
- Presenting work and solutions
- Explaining to peers
- Summarizing
- Active learning
- Asking questions
- Collaboration
- We want our students to be active, confident, creative problem solvers!

It may be different than what you're used to...

- In the classroom, students are primarily working with their peers to explore and solve problems
- Our book serves as a map and guide. It does not usually contain definitions or examples as those are discussed and done in class
- The homework (Ready, Set, Go!) includes a diverse set of problems that are both related to the current content and are review of past topics
- The integrated nature of the curriculum makes connections between and across sub-topics that span the artificial separations of algebra and geometry

Course Progression



A Parent's Perspective

Dr. Zeph Landau

Resources for U9 Students

LEAP (Learn Engage Accelerate Persist)

Elective class - goal: accelerate rather than remediate

Virtual Math 1 Google Classroom (code - ksu3cm7)

All resources are in one site

After School Math Tutoring Monday-Thursday in H112

Lunch Office Hours Everyday except Friday's in office G202 A

Summer Hybrid Math 1 Class

Tutoring Information

Our math department tutoring has both teachers and student tutors (from both BHS and UCB) to support students with homework, classwork, or other assignments.

- Math 1
 - Monday – Thursday from 3:36 – 4:36pm in H112
- Math 2
 - Monday – Thursday from 3:36 – 4:36pm in H217
- Math 3
 - Tuesday & Wednesday from 3:36 – 4:36pm in H307

Homework Help!

The purpose of homework is to give students an opportunity to interact with the mathematics outside of class. This is a time for practice and an opportunity to assess their understanding of the content.

If they are struggling, they can:

- Go to tutoring
- Look through their notes, warm-ups, classwork assignments, and previous homework assignments
- Explore the Support website for videos and example problems
- Do as much of the problems as they can, then write specific questions to ask in class the following day. Homework is not expected to be perfect.
- Talk to their teacher

Mathematics Department Website

Our Math Department website provides information about the math program at BHS, course progression, links to the student support sites for Math 1, Math 2, and Math 3, contact information for our teachers, and many additional resources.



Math Department Website

www.BerkeleyHighMath.com

Comments? Questions? Concerns?

If you do not have any questions, thank you so much for coming and this is the end of our presentation.

If you do have questions:

- Please write questions/concerns on Question Form and hand them in
- If we don't have a chance to answer your question tonight, we will contact you individually via email in a timely manner.

Thank you for attending Math Night!