



Center for Creative Arts

Honors Geometry

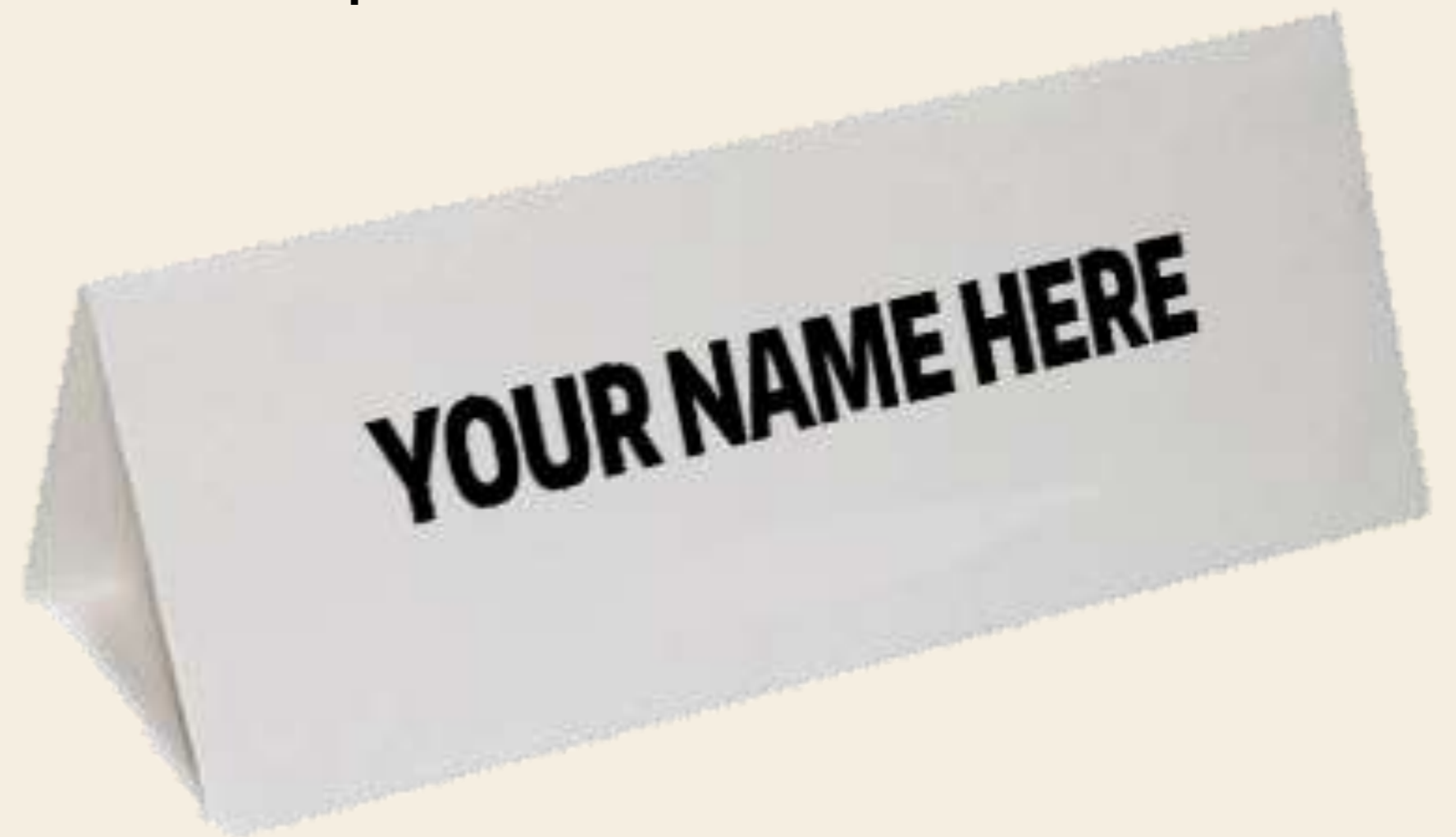
Mr. Nader Mohyuddin
2017-18

gnaw-there
mow-you-dean

نادر محي الدين

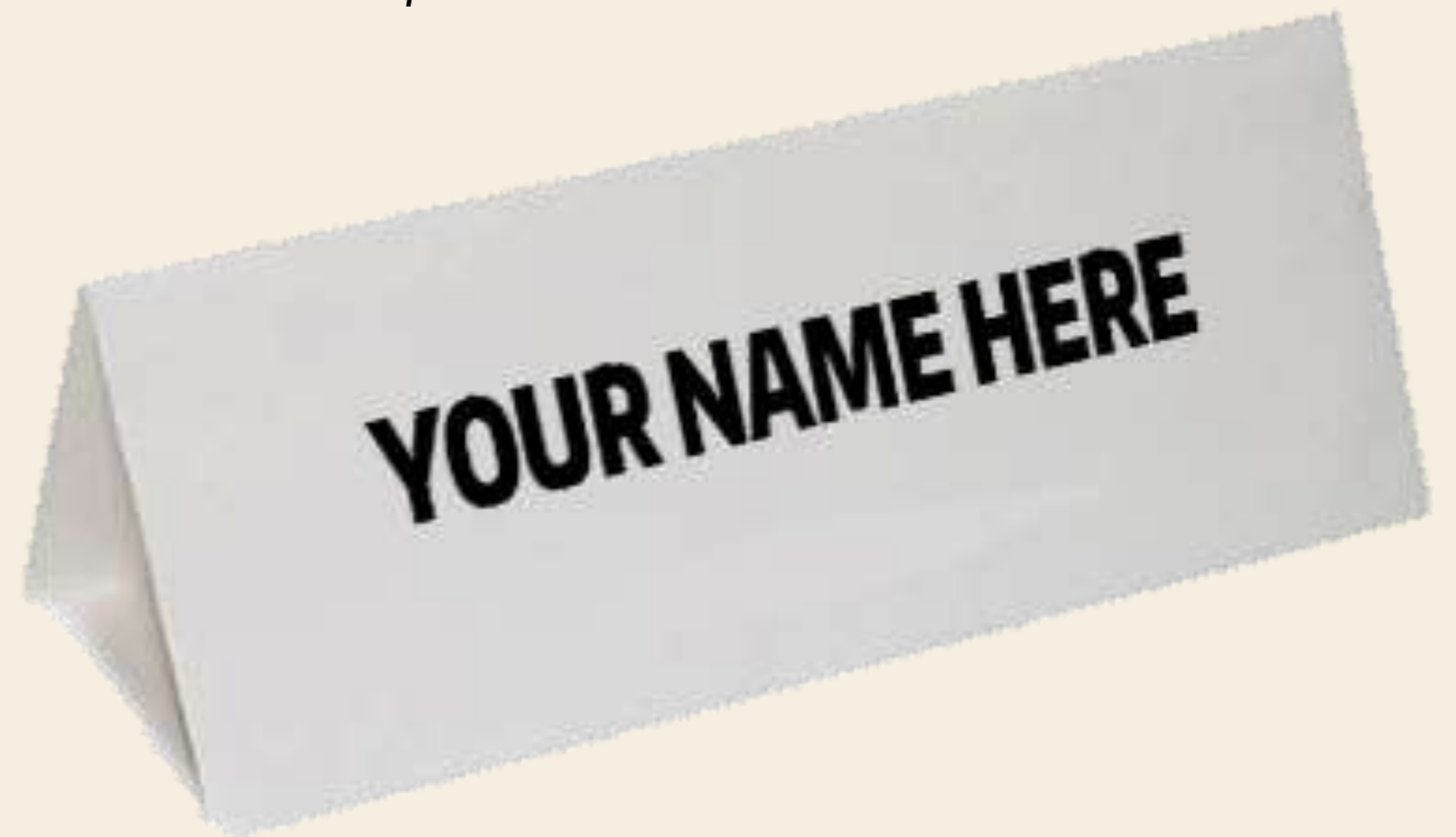
Name Tents

Fold page into thirds so the writing is inside
Write your preferred name + last name
Write on both sides of the tent please



Leave me feedback inside!

You'll turn these in each day for a week, leaving me a question, comment, or note that I'll respond to.



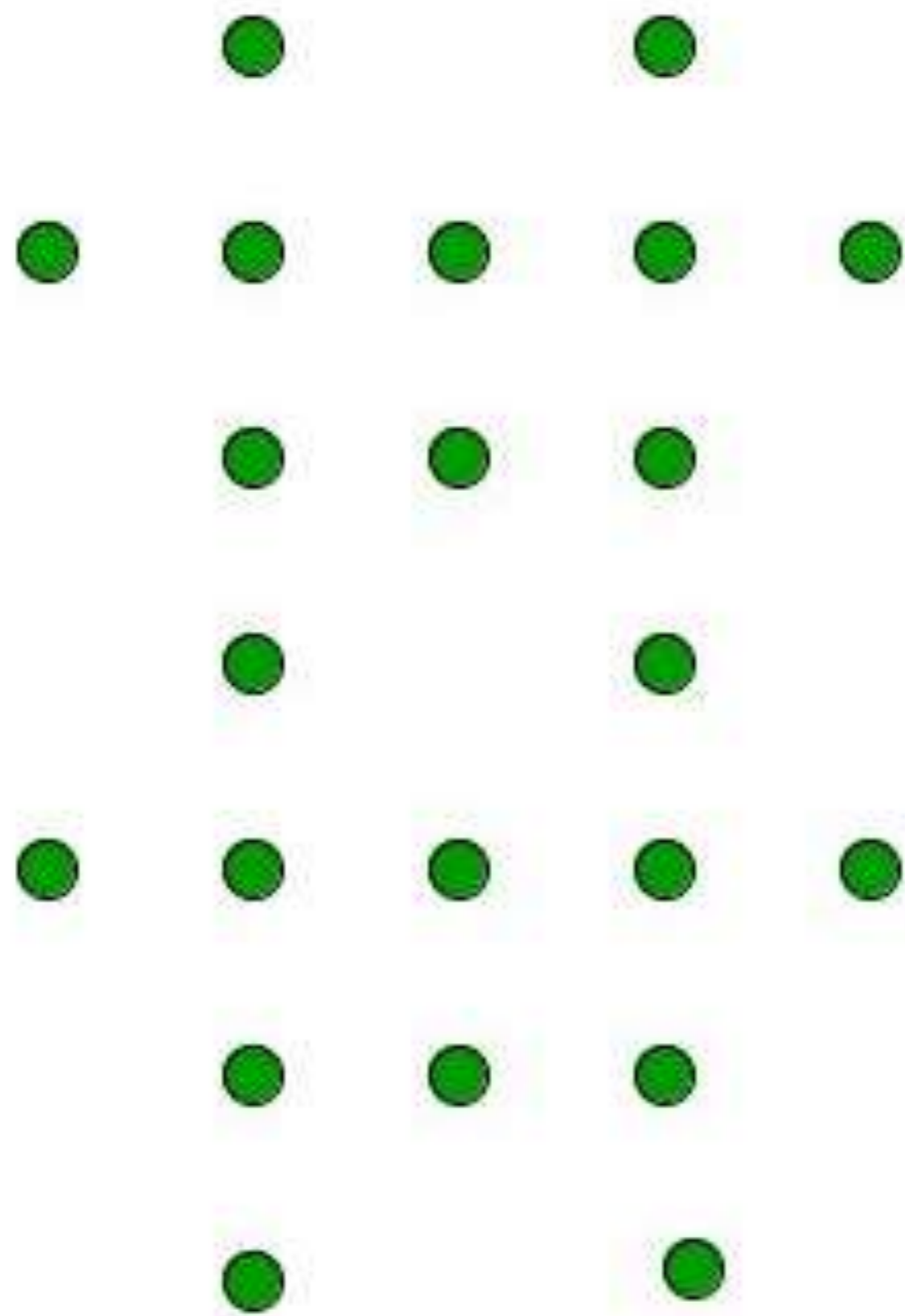
First things first



Attendance

Contemplate then Calculate

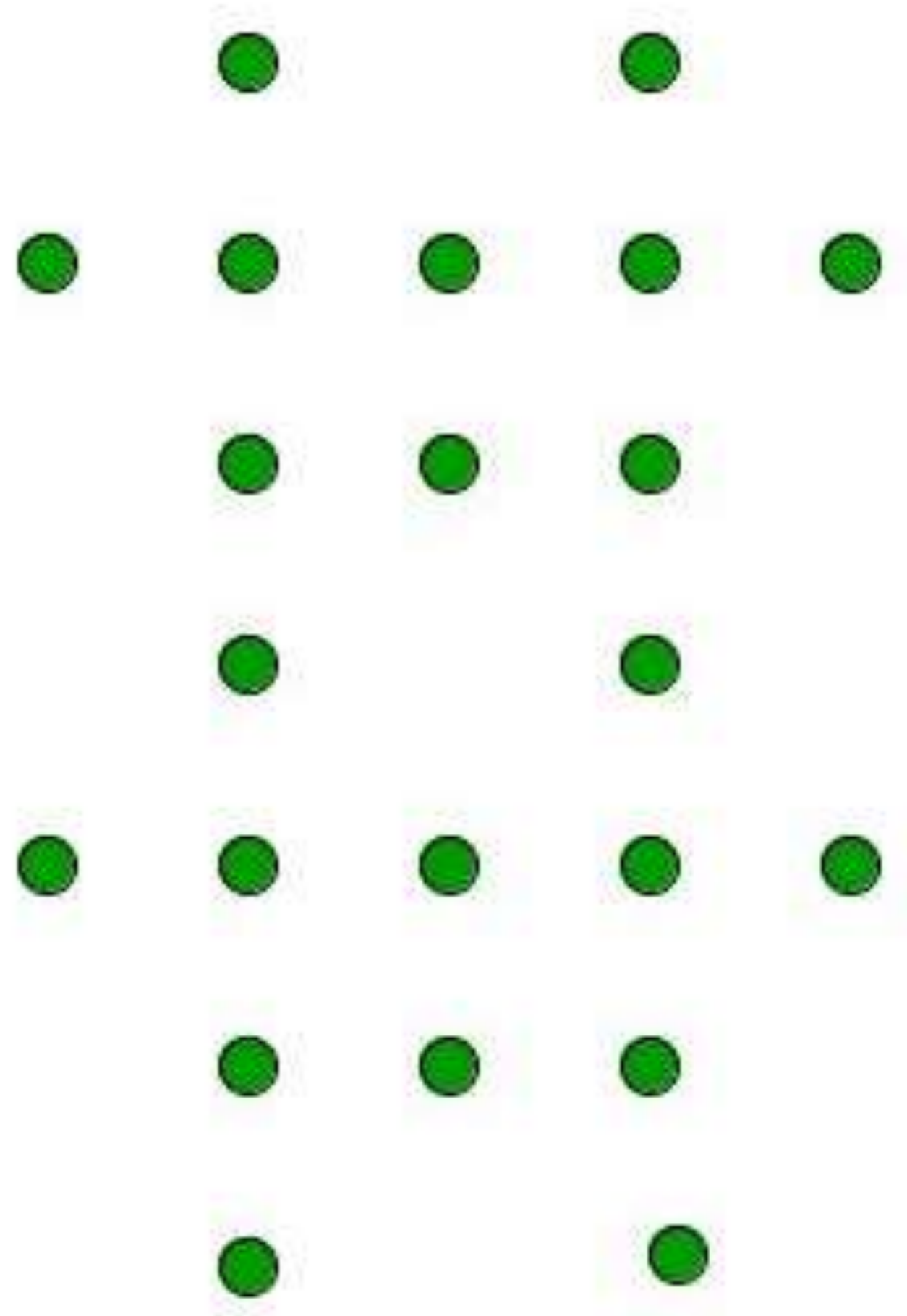
- ❖ An image will flash on screen for exactly 3 seconds
- ❖ How many dots are in the picture?



What did you notice?

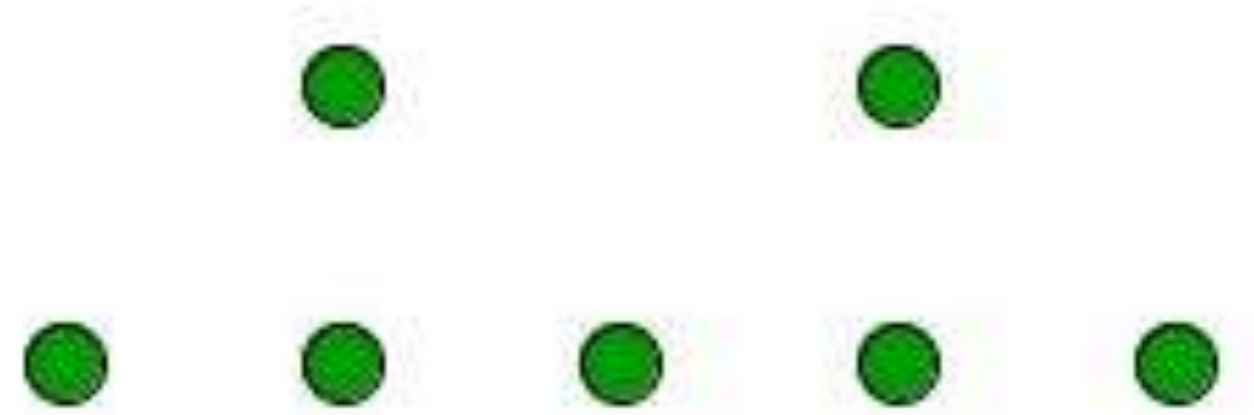
- ❖ Tell your table what you noticed
- ❖ Start with the person closest to the door and move to their left

How many dots are there?
Find a way to count quickly,
in your head.

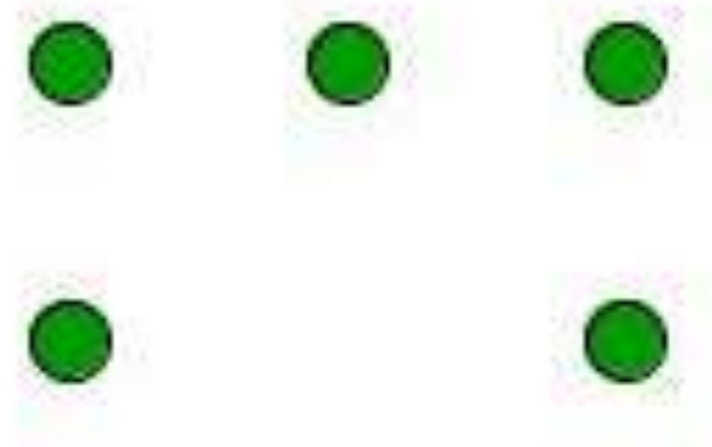


Be prepared to explain
your approach

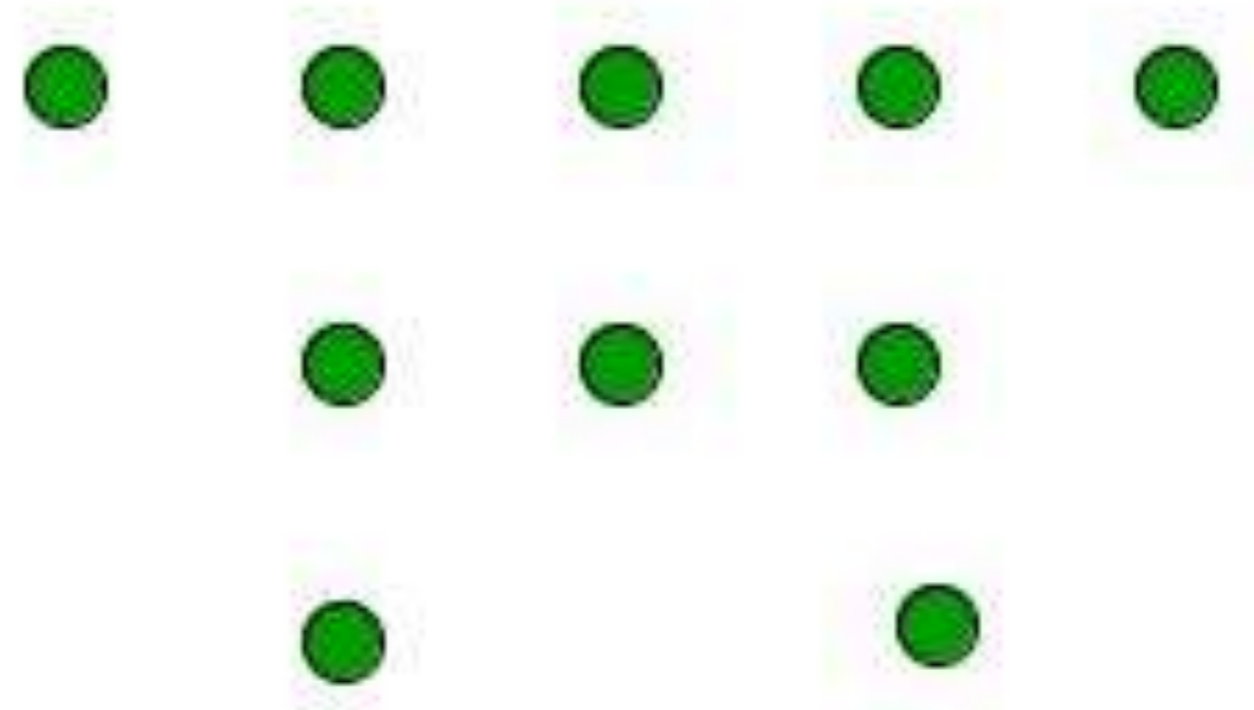
Share your number
and explain your approach
with your group.



The person who went last
goes first this time.

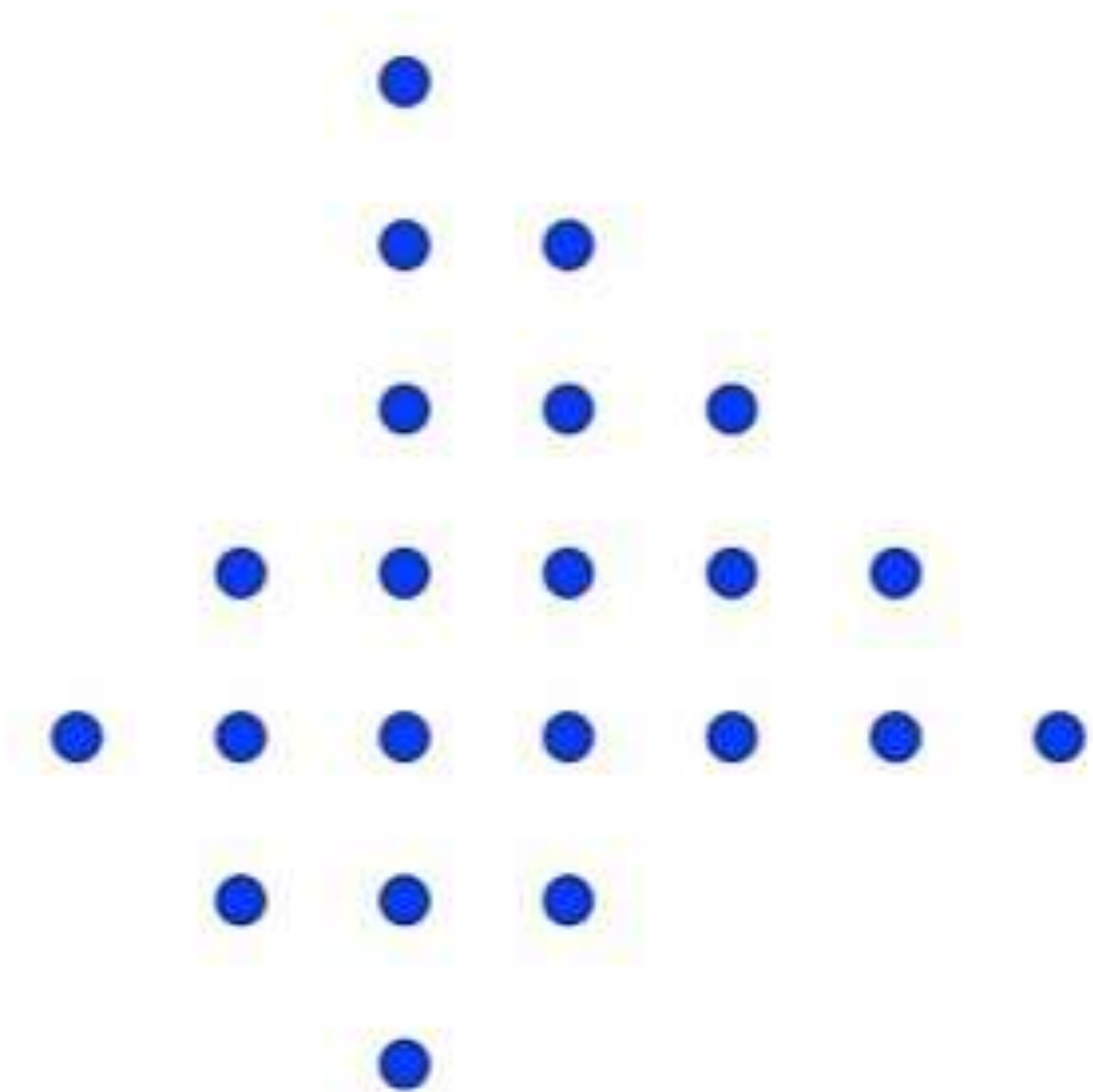


One person from each table
will share their approach
from the class



Let's do another!

- ❖ An image will flash on screen for exactly 3 seconds
- ❖ How many dots are in the picture?

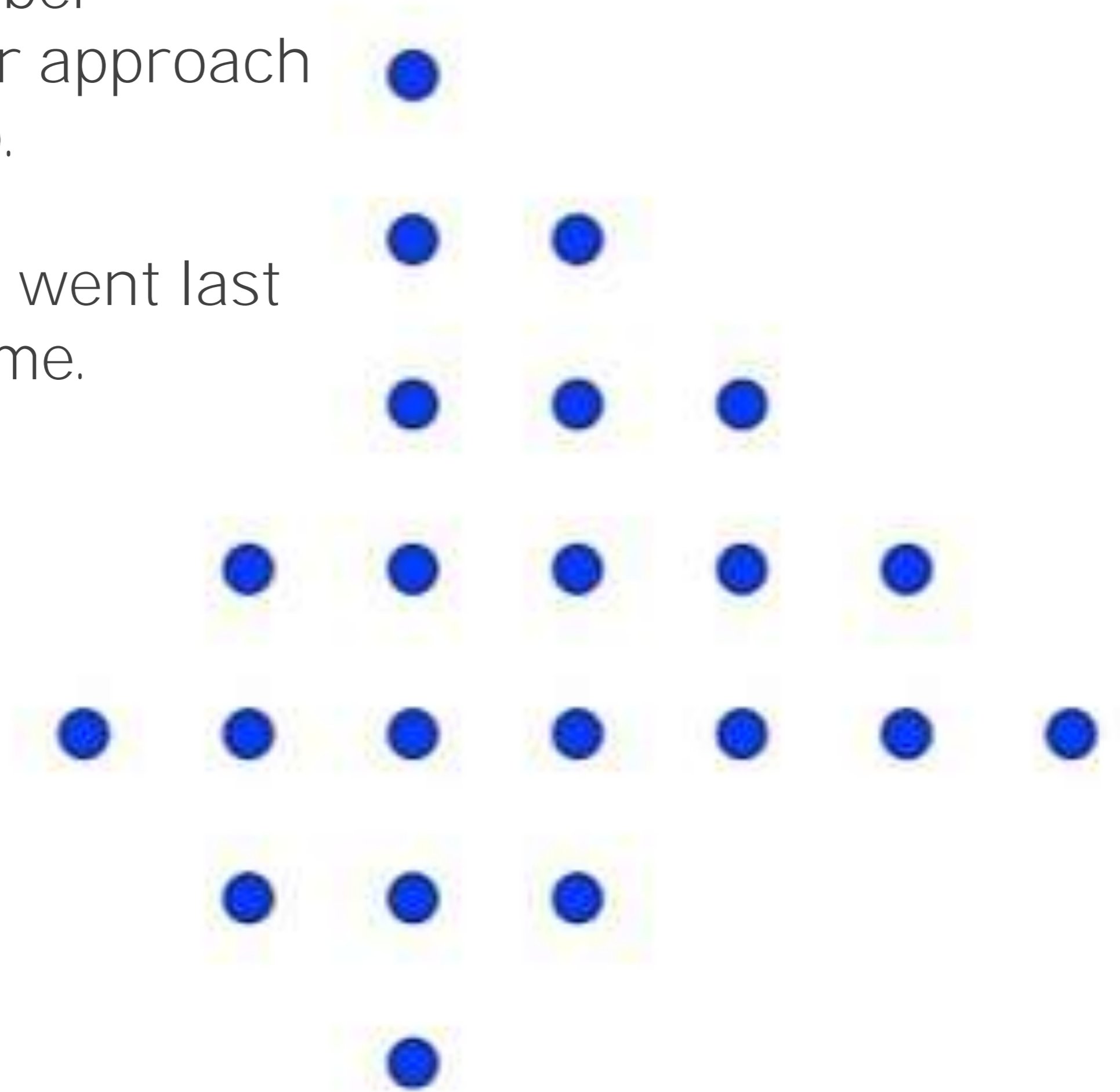


What did you notice?

- ❖ Tell your table what you noticed
- ❖ Start with the person closest whose birthday is coming up the soonest, then move to their left

Share your number
and explain your approach
with your group.

The person who went last
goes first this time.



Reflect on your learning

- A. To find a counting shortcut look for_____.

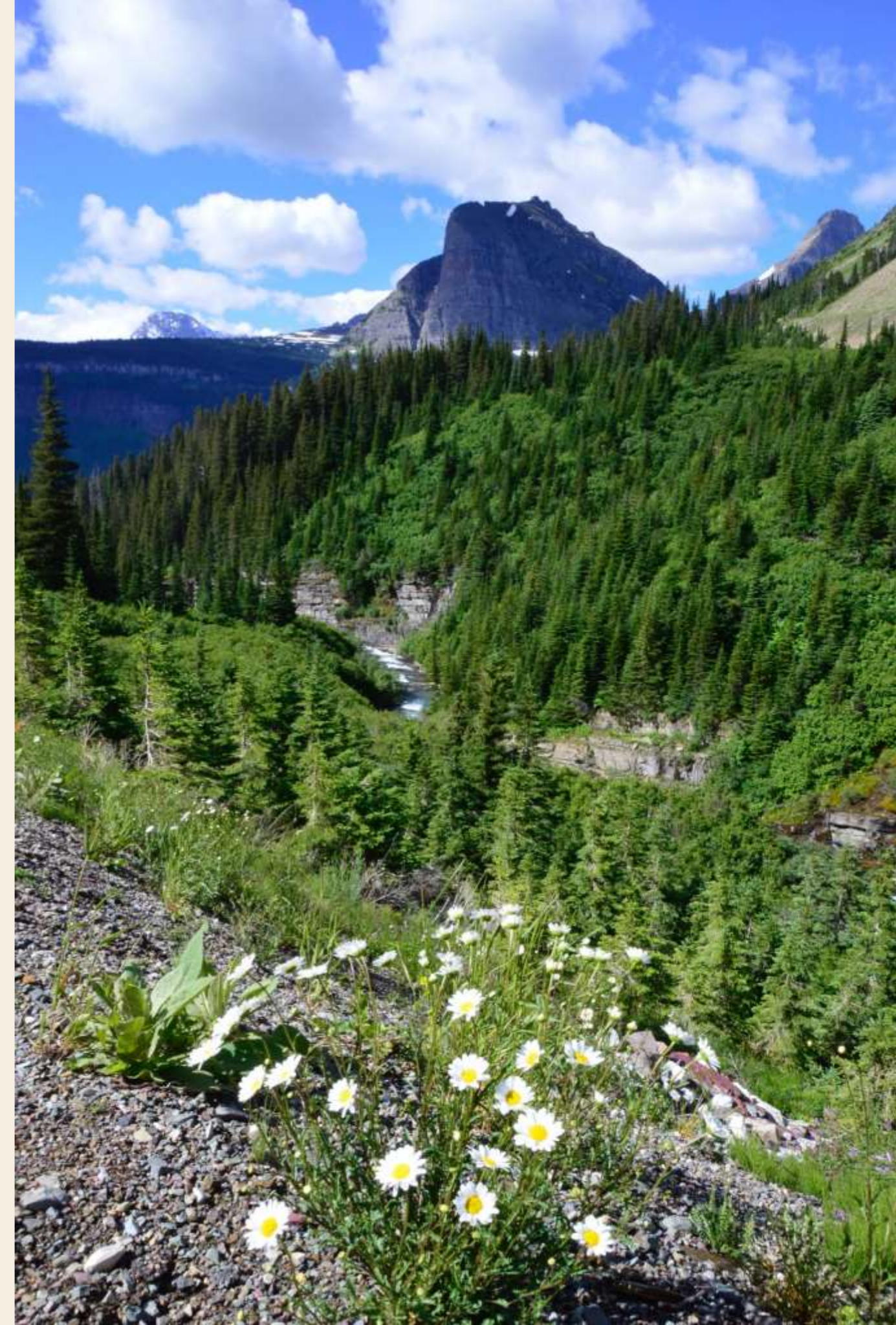
- B. Noticing _____ helped me find a shortcut because _____.

- C. A property that comes in handy when developing a shortcut is _____ because _____.

Agenda

- ❑ Some more brain exercises
- ❑ Student Information Form
- ❑ Our first geometry task
- ❑ Math as art; reading assignment

(Doing syllabus and getting books on Monday)



What do you notice?



Why are all drain covers round?

Privately think of at least two possible reasons

Tell your face partner your ideas.

The person who woke up earlier goes first.

Share out with your table.



A cast iron manhole cover can weigh as much as 200 pounds.



Round
Can't slip
through
a smaller
opening.

Square
Look out
below.



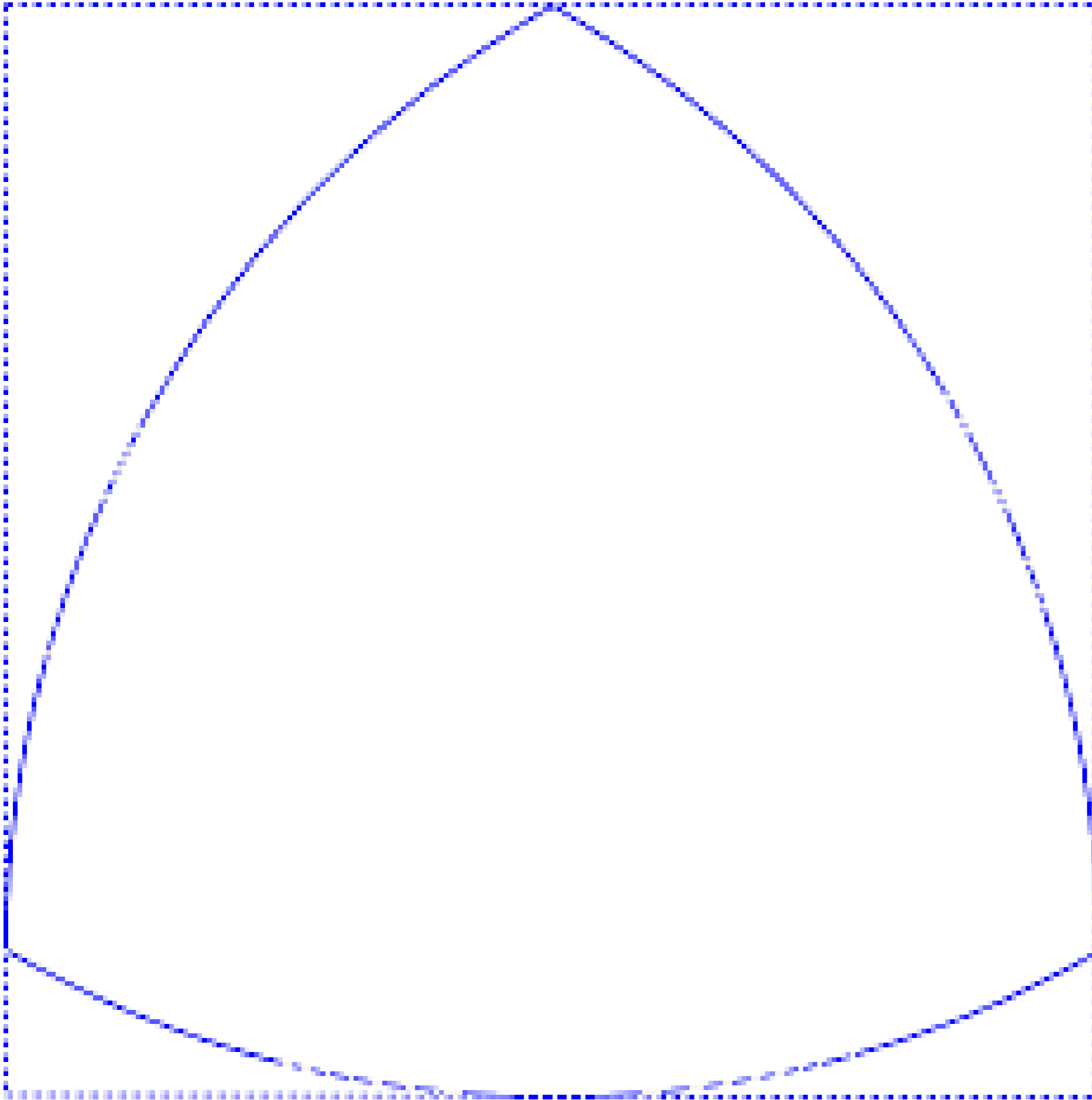
Is the circle the only shape with a constant width?

Think carefully

Sketch out your ideas if needed



Reuleaux Triangle

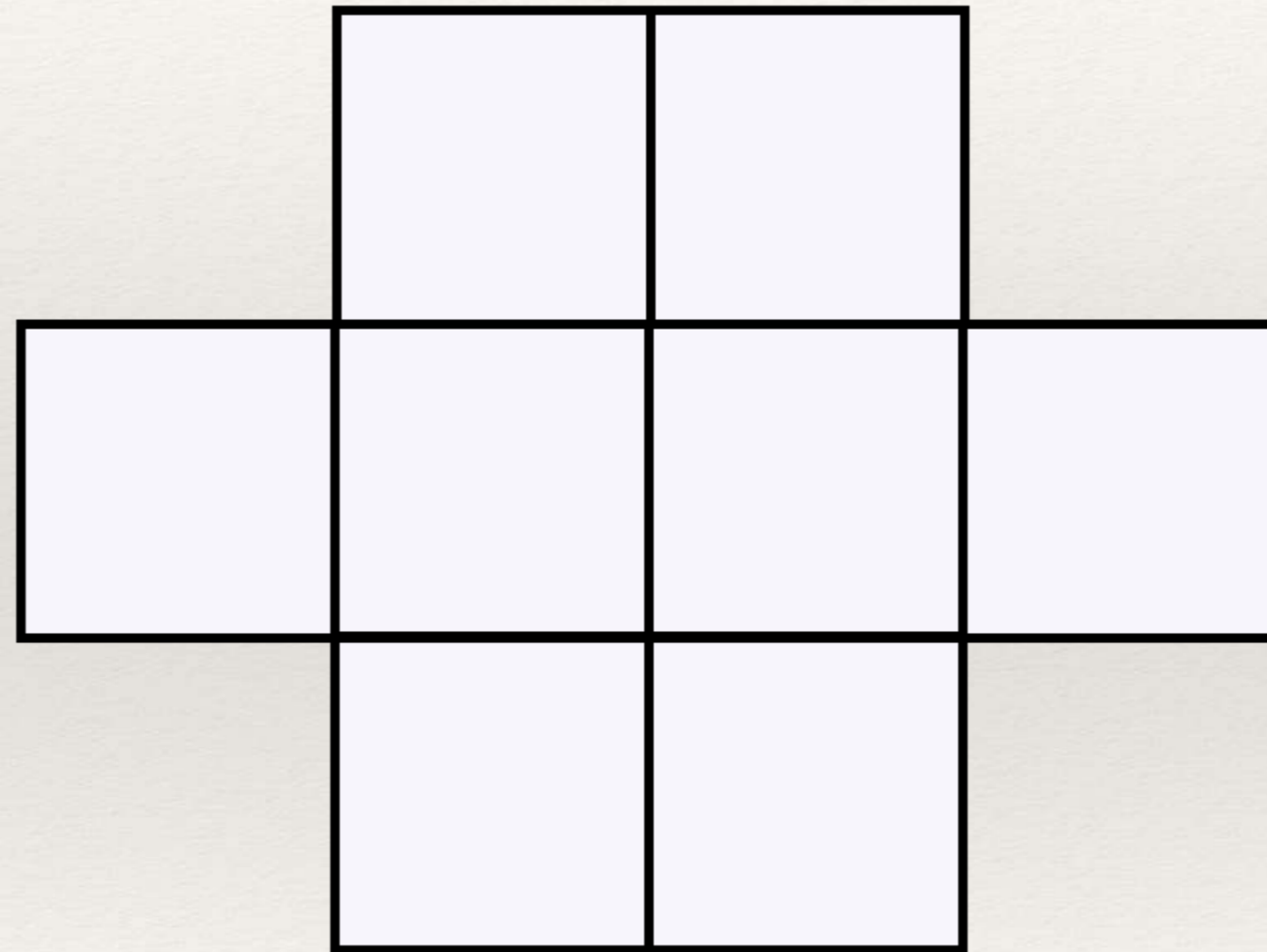






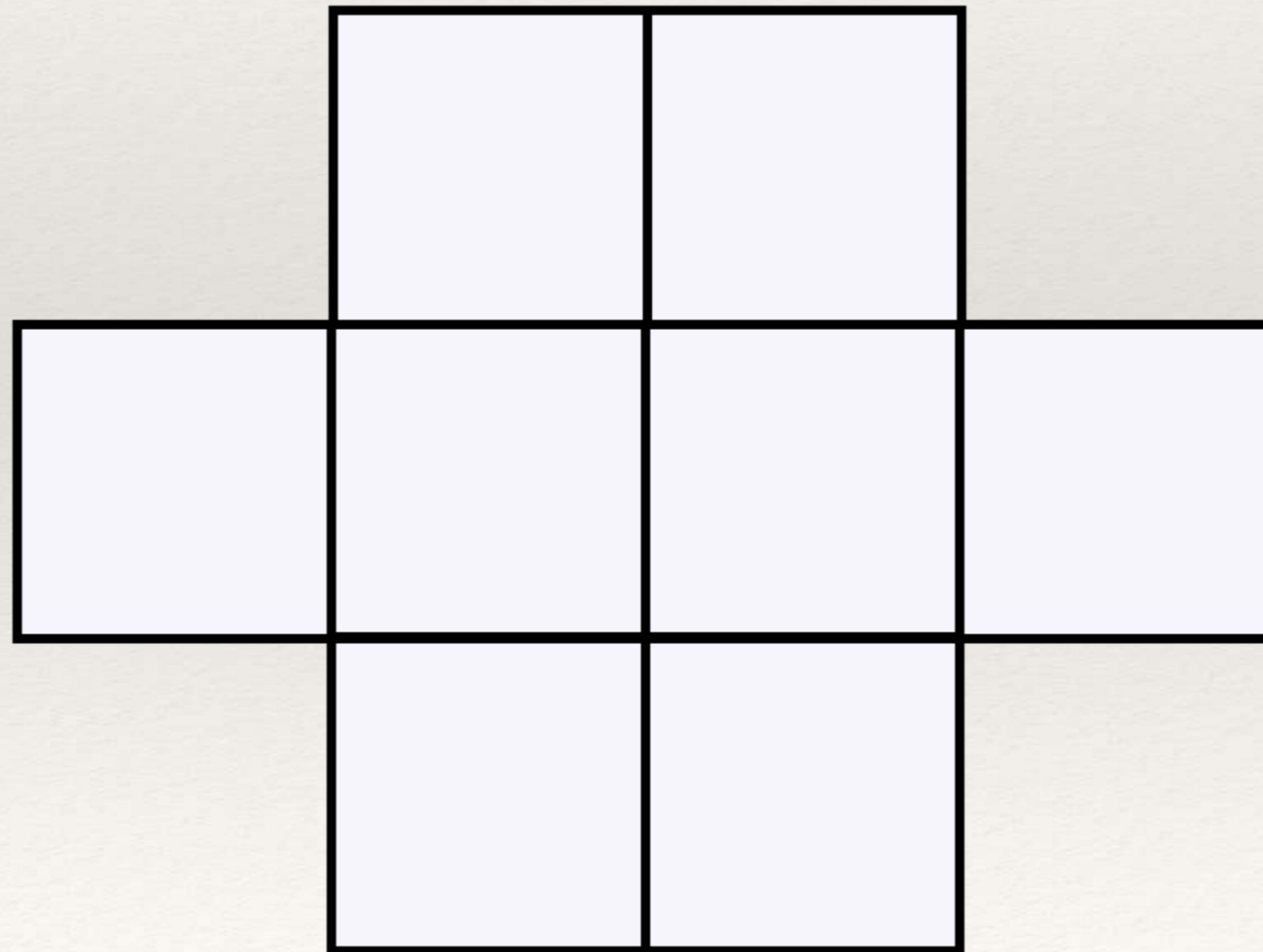
Gifsforum.com

Sketch this grid somewhere



Grid Game

Place the digits 1 through 8 into the boxes such that no two consecutive numbers touch, even diagonally.



Who is Mr. Mohyuddin?

- ❑ Eighth year math teacher
- ❑ Fifth year of HS math
- ❑ Born and raised in Tennessee
- ❑ Majored in mathematics and English at Duke University
- ❑ Masters at UTC
- ❑ Loves travel, reading, film, and cats



Who are you??

Time to visit...

The class website!!

<http://mgeo.weebly.com>



Fill out the survey: mgeo.weebly.com

- ❖ Can use a computer in the back of the room
- ❖ Need a paper copy? Let me know and I will give it to you.



Tell people to text @geo178 to the number 81010

They'll receive a welcome text from Remind.

If anyone has trouble with 81010, they can try texting @geo178 to (615) 713-1658.



Emergencies

- ❑ Fire: go left out the door, down the stairs, to second level parking lot, spot B9 by the speed bump. **STAY TOGETHER, STAY SILENT IN BUILDING**
- ❑ Tornado: go right out the door, around the hall, down the stairs and over to auditorium. Enter through the FAR door, near band hallway. Line up against wall.

Our first geometry task!

I will show you a brief video clip

What is the first question that comes to your mind?

Keep it to yourself for now.

How many boxes fit in the back of the Nissan Rogue?

Record your guess
Share it with your neighbors



What information do you need to solve this problem?



Estimate the dimensions



Before revealing any numbers, here's the plan:

Private think time to make sense of problem and work
Interpret and Compare with elbow partners:

Person A trades papers with B

Person A reads over B's work silently and vice versa

Person A explains to Person B what Person B did

Person B clarifies or corrects A's interpretation

Then switch

Use math and writing/diagrams/etc. to communicate

How many boxes will fit in the Nissan Rogue?



Approx. 54" wide, 26" deep, and 4 feet tall

1 inch = 2.54 cm

Well...are we right?



3 Act Math

Act I: short video hook generating questions

Act II: given the information needed, doing the math

Act III: watching theory and practice collide 😊

Homework

- ❖ Have parents fill out survey online (link on back of syllabus)
- ❖ Pay \$5 math fee (link on mgeo.weebly.com)
- ❖ Get supplies if needed
- ~~❖ Finish reading *A Mathematician's Lament*~~

Be sure to leave feedback inside name tent

before the bell rings! Hand them to me as you leave