Center for Creative Arts

Honors Geometry

Mr. Nader Mohyuddin
2016-17

gnaw-there
moe-you-dean

نادر محي الدين

starting off...

Attendance

agenda

- Brain exercises

- Assigning Books*

- Student Information Form

- Syllabus, grading system

- Math as art; reading assignment

What do you notice?

EPB

CITY OF CHATTANOOGA

NO DUMPING—DRAINS TO RIVER USA

Why are all drain covers round?

Privately think of at least two possible reasons

Tell your elbow partner your ideas.
The person who woke up earlier goes first.

Share out with your table.

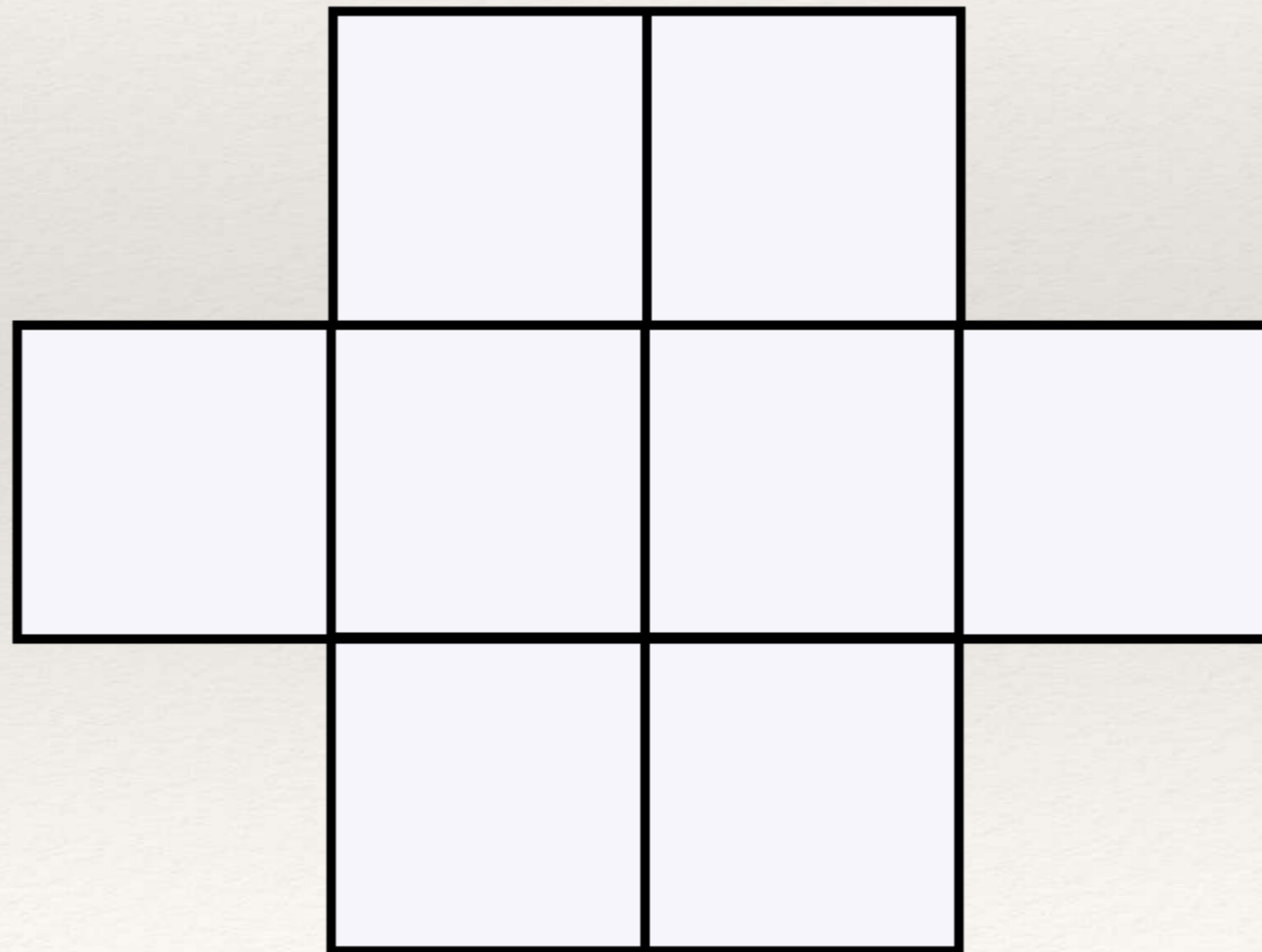# A cast iron manhole cover can weigh as much as 200 pounds.

Round
Can't slip through a smaller opening.

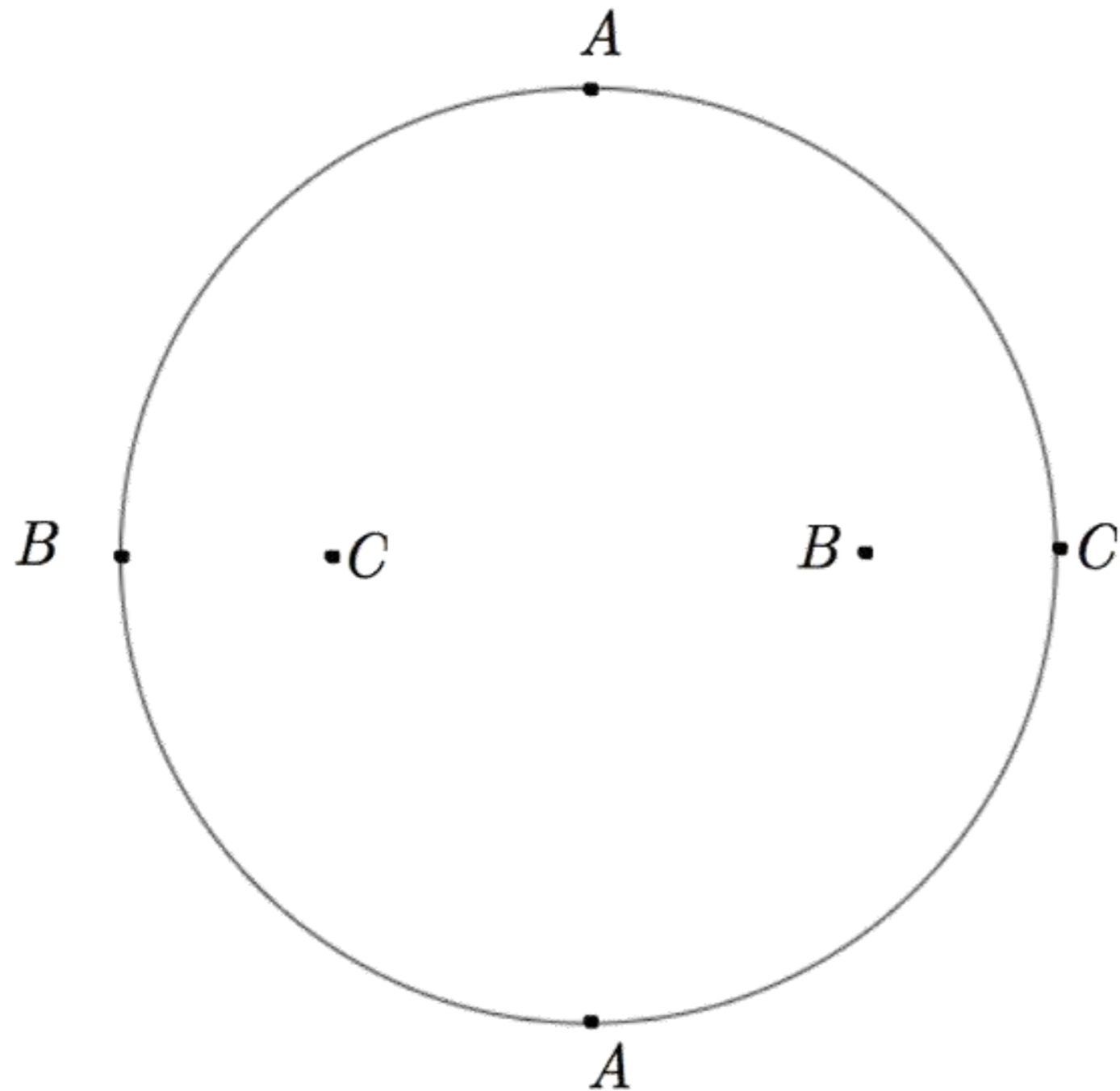**Square**
Look out below.

Grid Game

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

Polya's Disk

Working entirely within the circle, can you connect A to A, B to B, and C to C so that the connecting, continuous curves avoid intersection?

Find a solution <u>or</u> prove that a solution is impossible.

Grid Game, Revisited

Find a ten digit number that describes itself. The first digit tells how many zeroes there are in the whole number; the second digit tells how many 1's there are; the third digit tells how many 2's there are—and so on until the last digit tells how many 9's there are.
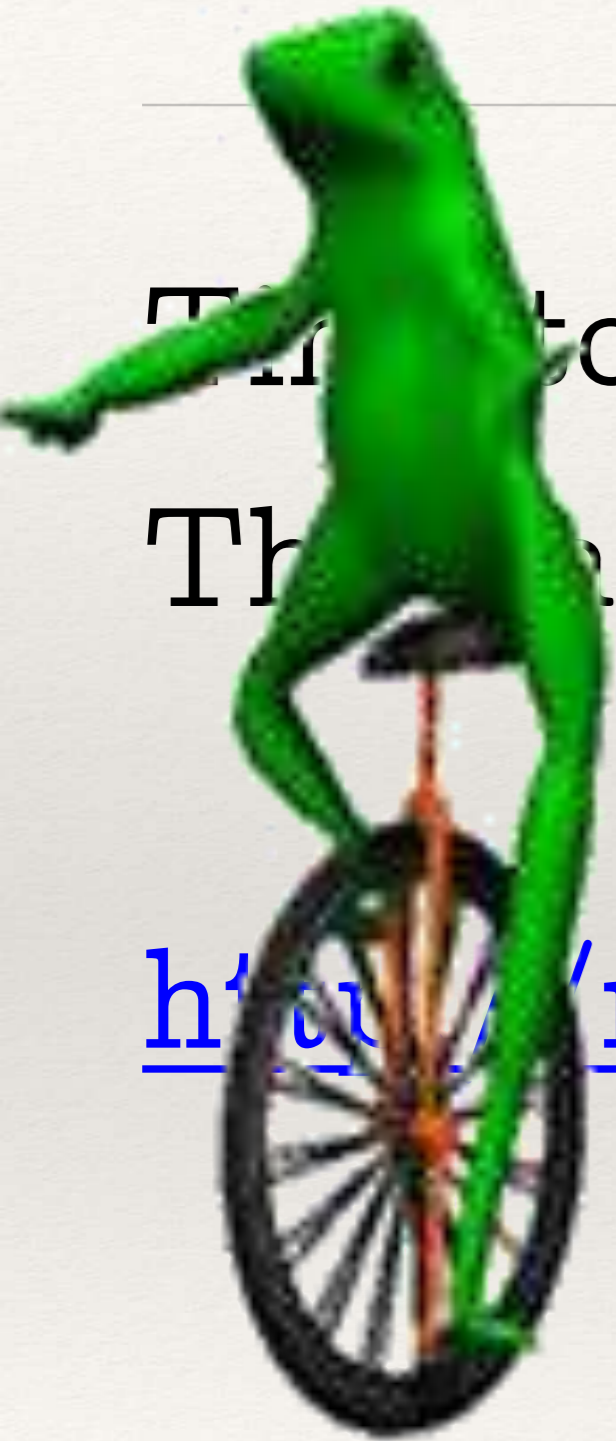
multiply mentally

No writing...multiply in your head

$$(x-a)(x-b)(x-c)...(x-z)$$

Who is Mr. Mohyuddin?

- Seventh year math teacher

- Fourth year of HS math

- Born and raised in Tennessee

- Majored in mathematics and English at Duke University

- Masters at UTC

- Loves to travel and read
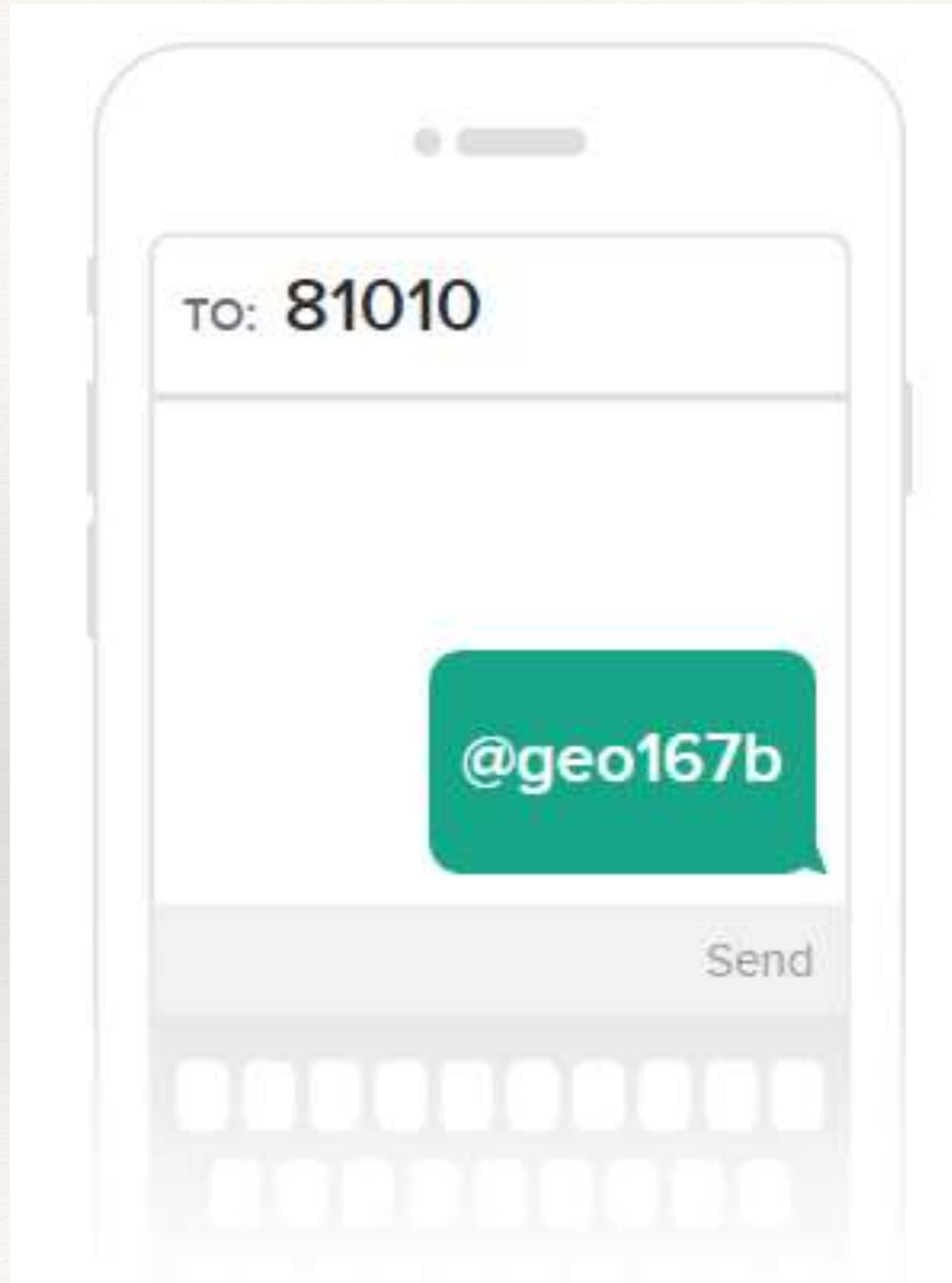
Who are you??

Time to visit...

The class website!!

http://mgeo.weebly.com

Fill out the survey

❖ Can use a computer in the back of the room

❖ Need a paper copy? Let me know and I will give it to you.

TO: **81010**

@geo167b

Send

Syllabus

Important Points
- Dividers in Binder
- Math fee
- No notes on loose leaf, always in notebook
- Use assigned calculator; Desmos.com
- Limit time out of class
- No food or drinks besides water

Syllabus

- Goals and Homework
- Greeting and mindfulness
- Homework solutions
- Warm up and lesson
- Summary and clean up

Standards Based Grading

- Measures what you <u>know</u>, not how well you take tests or how much you memorize
- YOU are in control of your grade, not me
- Failure is not an option: retest until you master the skill
- Growth is rewarded
- Homework, homework, homework

Advice from Last Year's Students
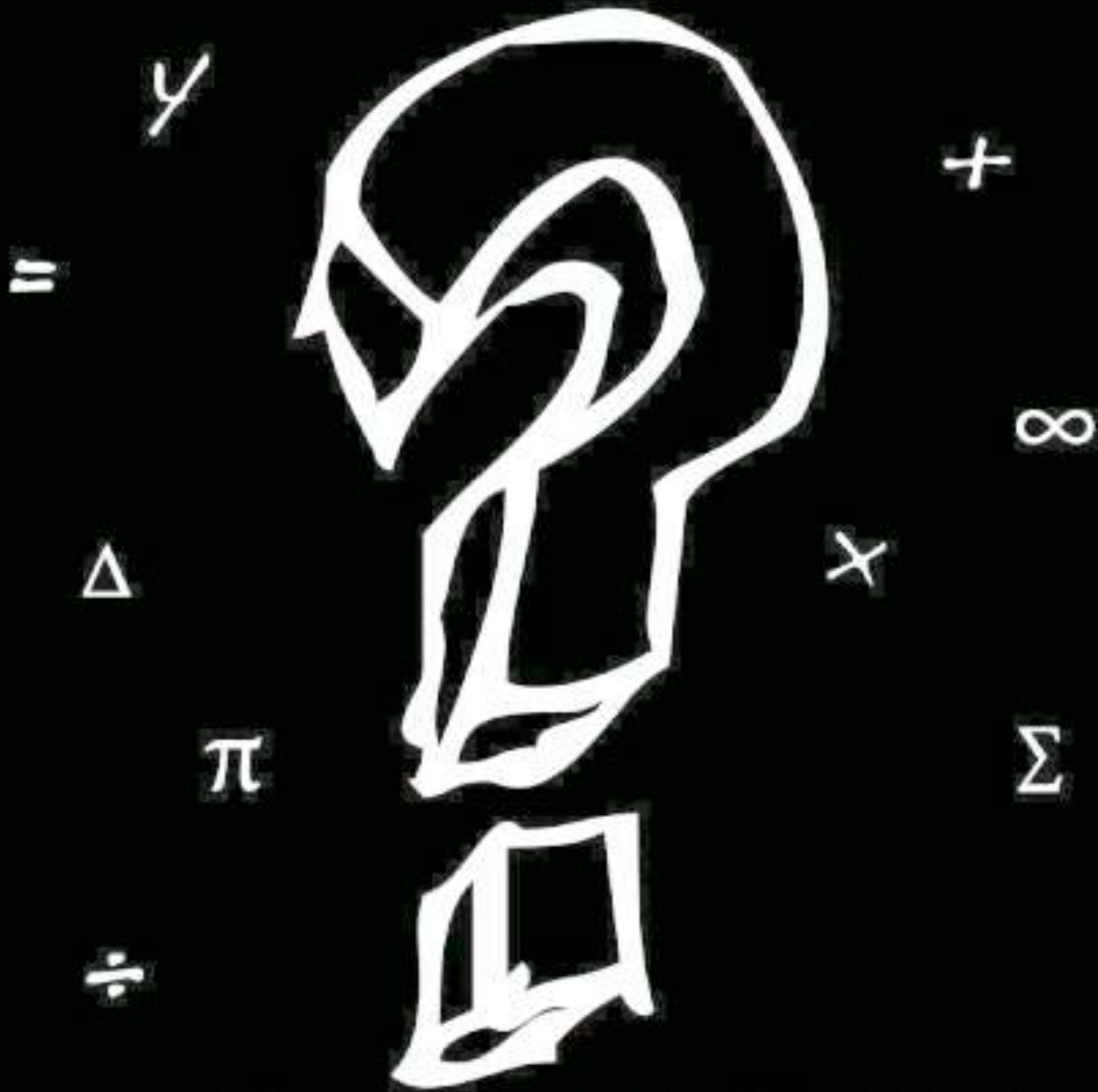
Peer Tutoring!

Want tutoring during DS?

Want to be a tutor during DS?
[Looks GREAT on resumes!]

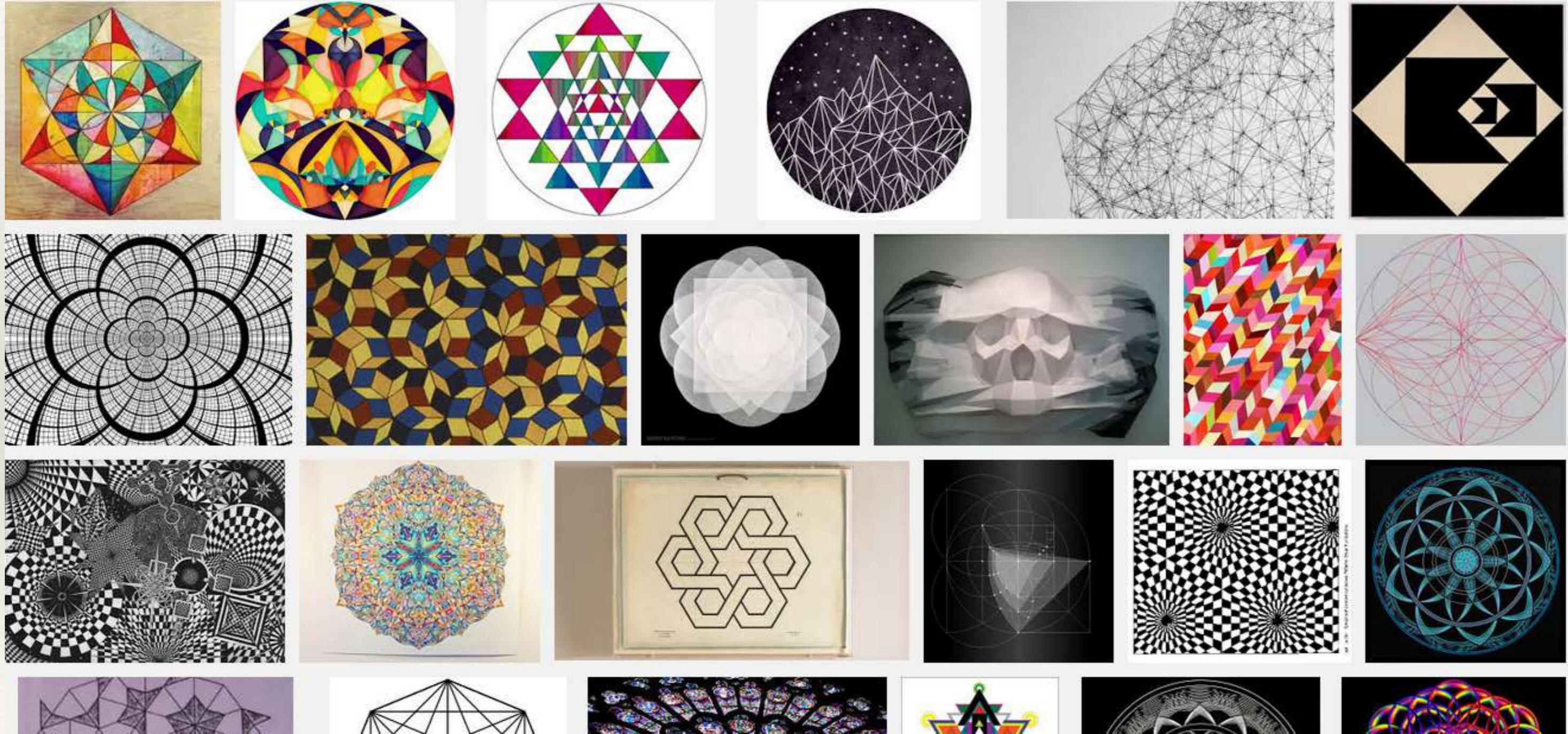Apply now!
Return to me by Friday!

Keep an eye out for contest dates!
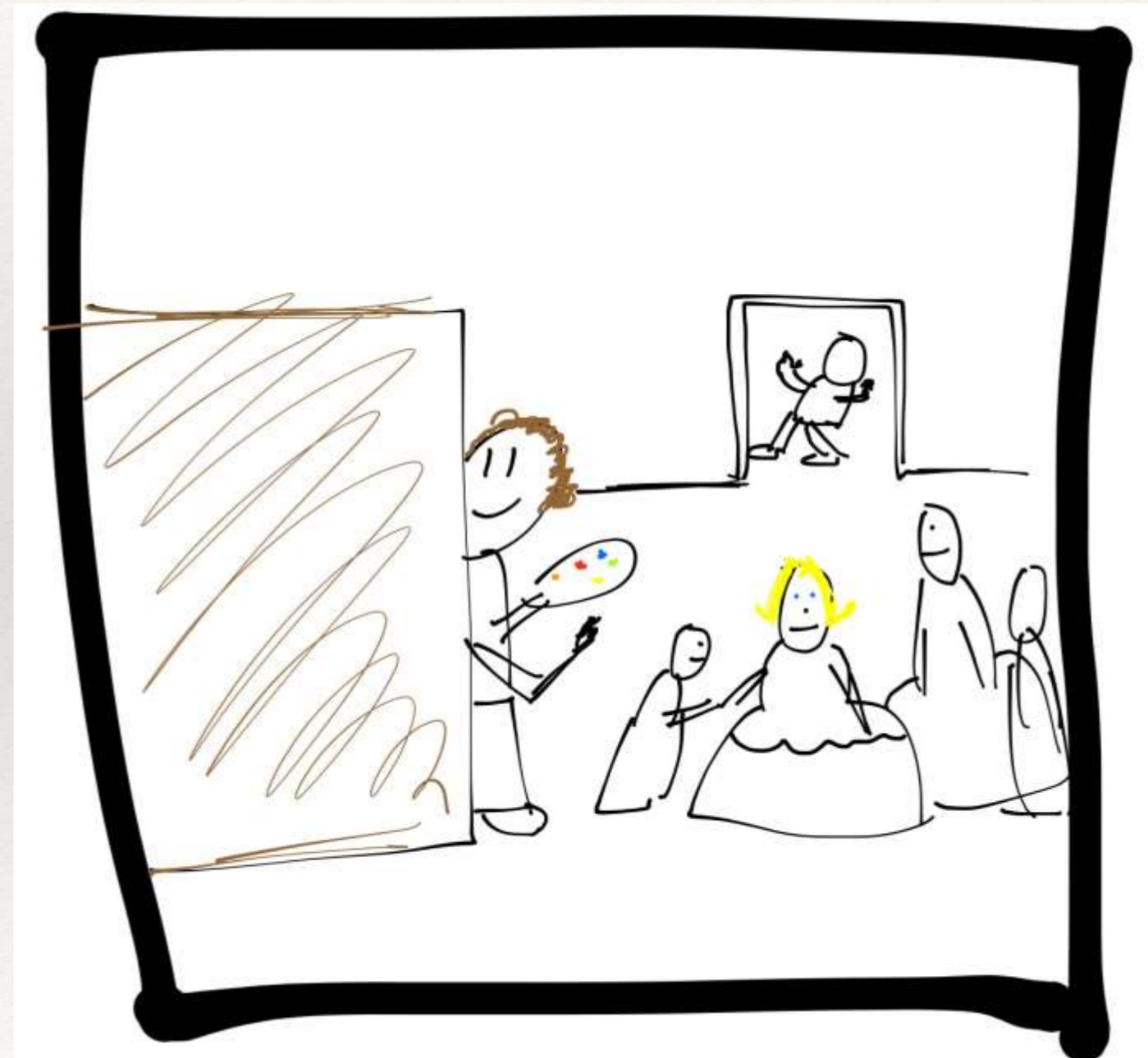
CCA MATH QUIZ BOWL

Emergencies

- Fire: go left out the door, down the stairs, to second level parking lot. 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.

Math is an art.

Math is an art.

Which painting is better?

Which math is "better"?

$3x^2 - 12x - 63 = 0$

$3(x^2 - 4x - 21) = 0$

$3(x - 7)(x + 3) = 0$

$x - 7 = 0$
$\underline{+7 \quad +7}$
$x = 7$
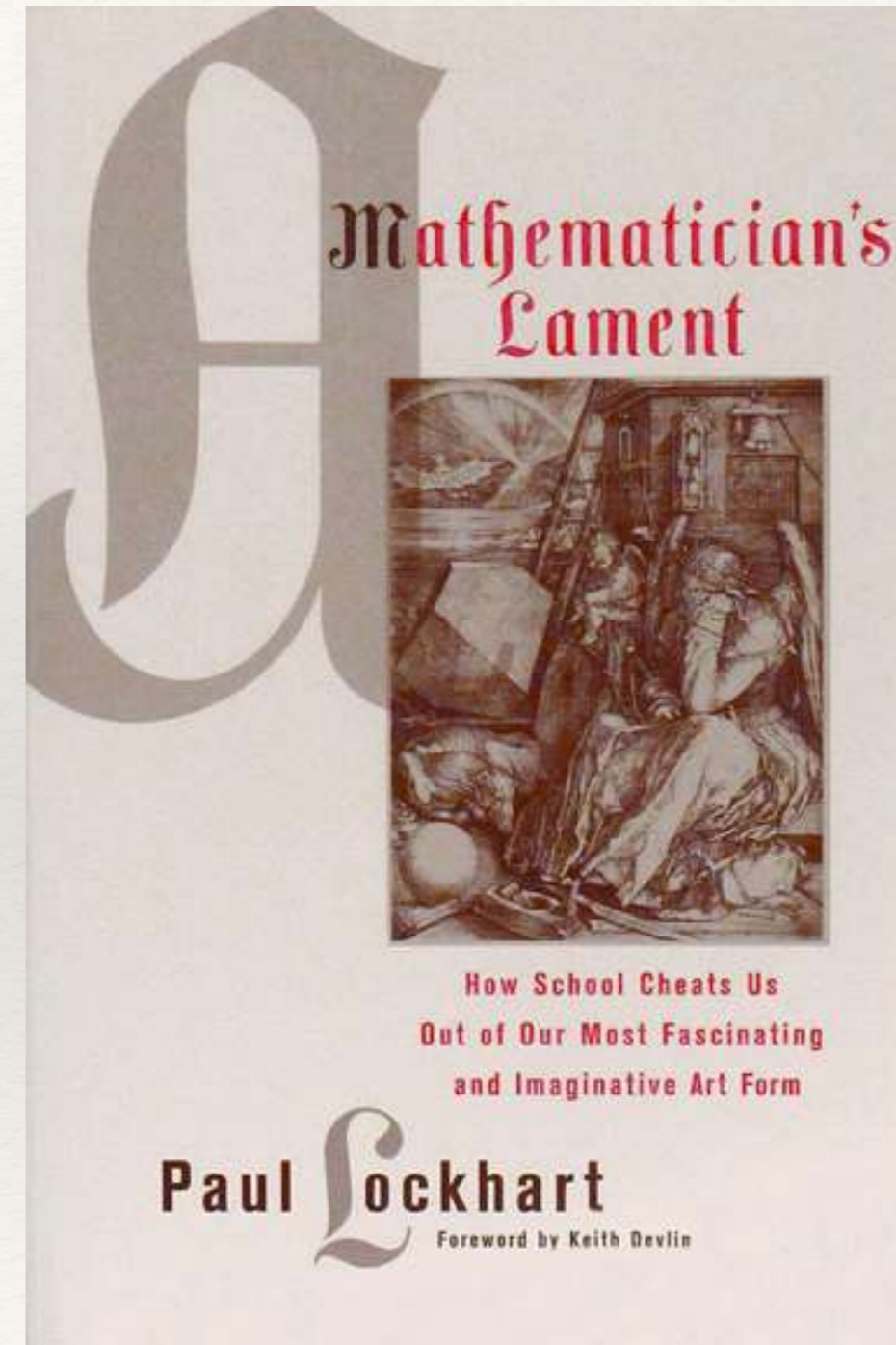
$x + 3 = 0$
$\underline{-3 \quad -3}$
$x = -3$

$3x^2 - 12x - 63 = 0$

$x = 7, \quad x = -3$

Think back to our brain exercises...

What skills did they require?

"A Mathematician's Lament"

- ❖ What is a lament?

- ❖ Dr. Paul Lockhart

  - ❖ Ivy League math professor

  - ❖ Quit teaching university

  - ❖ Reforming math education

Homework

* Have parents fill out survey online

* Pay $5 math fee

* Get supplies if needed

* Finish reading *A Mathematician's Lament*