

A hand is shown placing a puzzle piece into a larger puzzle. The puzzle pieces are white and blue, and the background is a dark blue gradient. The text is written in a white, hand-drawn style font, slanted upwards from left to right.

A MATH CURSED LIFE  
GEAR UP CONFERENCE  
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# MATHEMATICS HAS A PUBLIC RELATIONS PROBLEM

- Parents
- Senators
- Eye Clinic Receptionist
- Speeding Ticket
- Boring





# STUDENTS HAVE CHANGED

- I have ADD!!
- Millennials' characteristics
- Can't please all of them all of the time
- Absenteeism
- Mobility





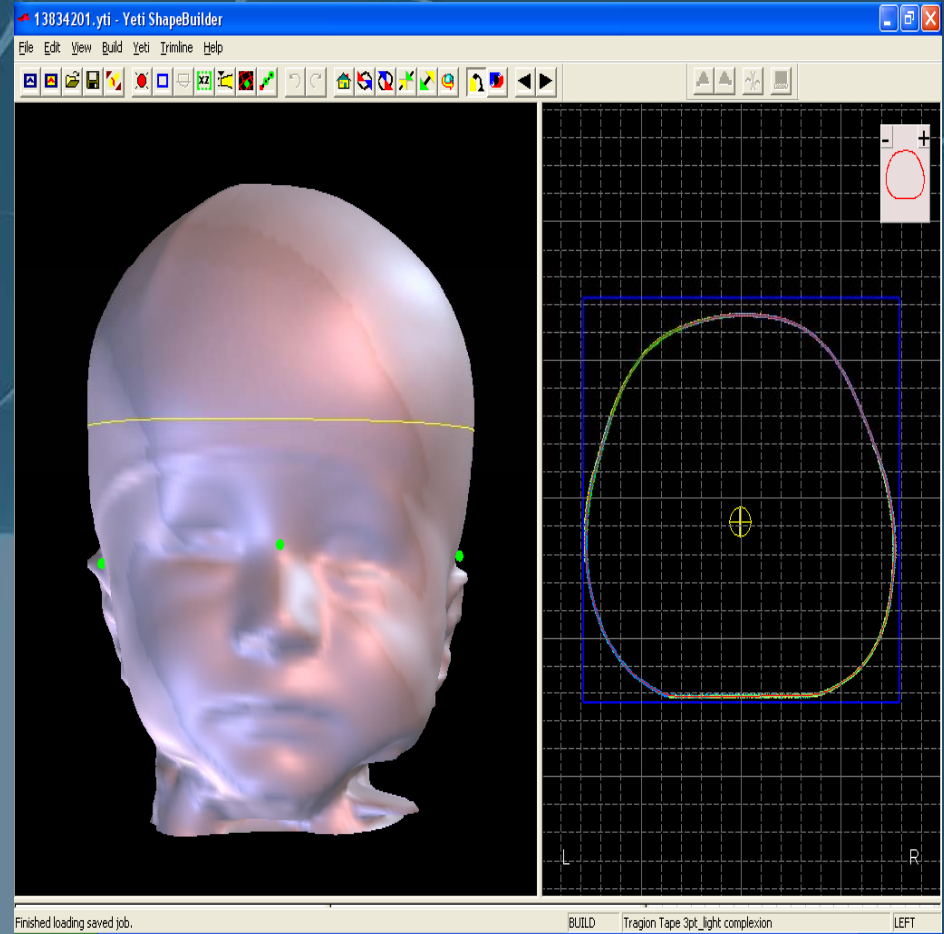
# THE CURRICULUM HAS CHANGED

- Round Clocks
- Basic Facts-memory obsolete
  - Finger Multiplication
- Fractions
  - Doubling a Recipe
  - Craig Ruler Measurement
  - 4 ft 3.5 in = 4-3-8
- American Algorithms
- K-8 Added and Added but 9-12 Delete and Delete



# TECHNOLOGY HAPPENED

- Mathematica
- How old are you?
- Batman.com
- Combing Hair with Phone
- Reading a book differently
- Using calculators as tools and not crutches





# READING AND WRITING

- **Reading strategies helpful?**
- **Vocabulary**
  - **Vertex**
  - **Dolly Parton Fractions**
  - **Sphere**
- **Student Journals**

**Seven Students brought enough pencils to class to share equally among themselves.**

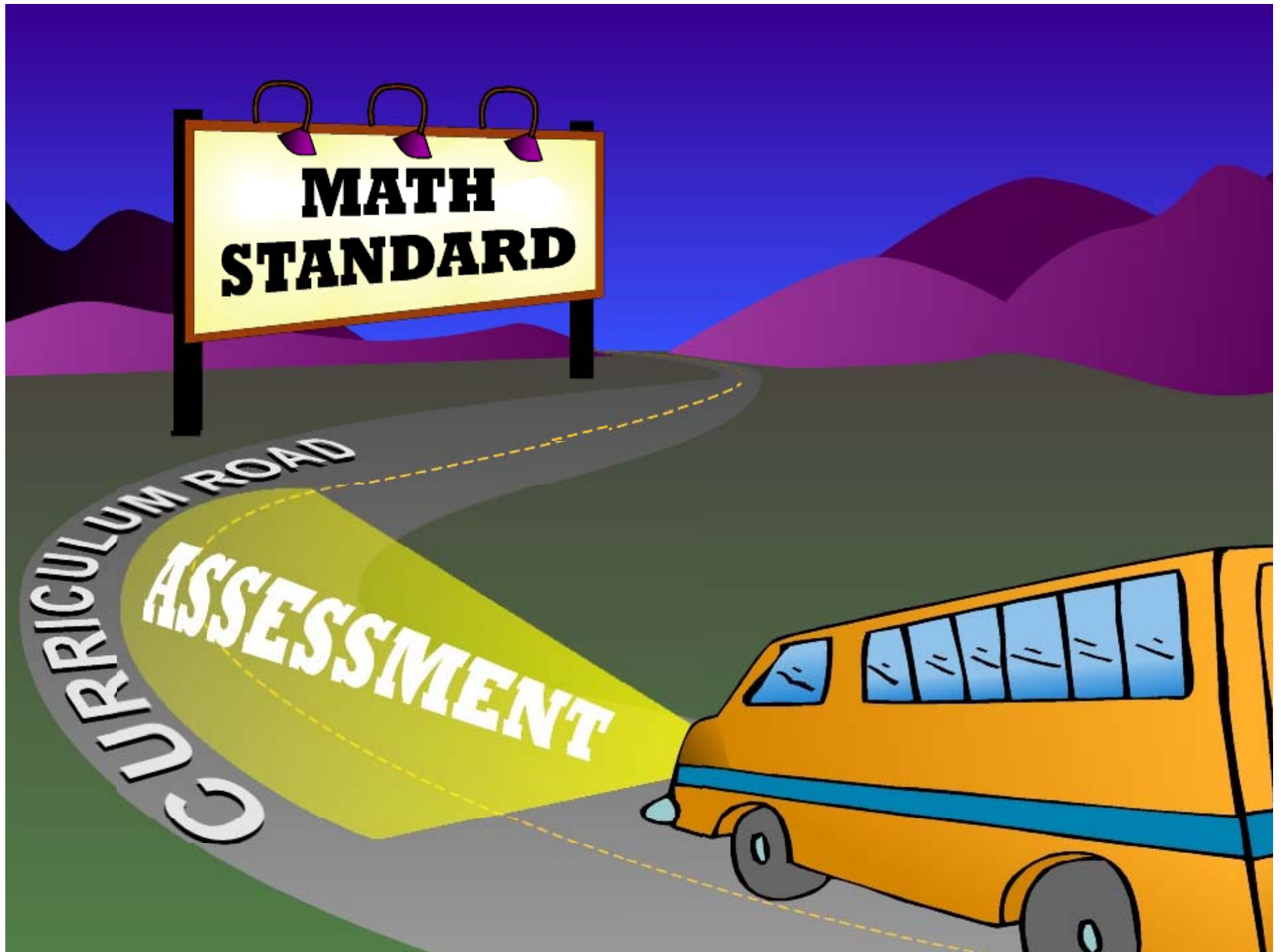
**Which could be the number of pencils they bought?**

- A. 27**
- B. 38**
- C. 56**
- D. 64**



# TEACHING METHODS HAVE CHANGED

- Problem Solving – what's that?
- Games
  - What you wish they had learned before now
  - Reinforces basics
  - Around the World
- Two Column Proofs/Brain Research
- Exponents/Scientific Notation
- Questioning Strategies





# ASSESSMENT METHODS HAVE CHANGED

- Multiple Choice part of this generation forever
- “Antagonistic” relationship with students?
- Cumulative Assessments with Corrections
- Common sense
  - Two parallel lines cut by a transversal
  - POE
- Use of tools
- Cognitive complexity



# Local Assessments

## ISAT

- **Common by grade level**
- **ISAT types**
  - **Multiple choice**
  - **Short Response**
  - **Extended response**
  - **Include the cognitive complexities**
- **Aligned to the monthly IAF curriculum**
- **Created to use the data to make decisions for instruction and curriculum**

## PSAE

- **Common by course**
- **Use PSAE types**
  - **ACT Multiple Choice**
  - **WorkKeys Multiple Choice**
  - **Include the cognitive complexities**
- **Aligned to the course IAF objectives**
- **Created to use the data to make decisions for instruction and curriculum**



# Using Data

- External math audit to guide where to spend your money and time.
- Which one doesn't belong?
- What story do the numbers tell us?
- What makes you say – HUH?





# DO MATH WITH ME GRANDMA

- “We’re home—4992 miles, 15 days, 13 states, and only 1 argument”
- Only 1 Teddy
- I can teach him math
- Transitive Property
- Minutes/Hours





# ALGEBRA 2 FOR ALL??



# CLOSING

- WHAT WOULD YOU DREAM FOR IF YOU KNEW YOU COULDN'T FAIL?
- WHETHER YOU THINK YOU CAN OR NOT – YOU'RE PROBABLY RIGHT
- WHERE DO WE GO FROM HERE?