

Created by Mr. Lischwe

# Warmup 8/ $\left(\frac{12}{3} + \frac{12}{4}\right)$

**\*\*\*Please have your intro questions, binder, and pen/marker to show me when I come around!\*\*\***

1. Think back to last year's math class. On your post-it note, write down **AT LEAST** one thing you **LIKED** about this math class. It could be an activity you enjoyed. It can be something your teacher did one time that you remember helped you learn. It can be an overall habit your teacher had that was useful for you. Anything you want! **When you are done, go stick your post-it to the board in the back of the class.** You may request another post-it note if you would like to put more than one thing.
2. Estimate in your head: What is the average number of hairs on a person's head?
3. **EARLY FINISHERS:** Get your job application sheet out. (Unless you already turned it in)

# Average # of hairs on a person's head

- Overall average = about 100,000
- Blondes = about 150,000
- Brown/black hair = about 100,000
- Redheads = about 90,000
- (If you are blonde, it is not appropriate to point to someone else and say “Haha! I have more hair than you!!!)

Turn in Intro Questions

# Homeroom only...

- Student Council Rep will be chosen tomorrow!

# Kahoot Winners...

- Top 3 from each class – choose:
  - Purple chair for today
  - Sticker
  - Jolly Rancher (I only have 2)
  - Small mint

# Job Applications

- For each job, there is a description of what you would have to do and the skills necessary to do a good job
- You do NOT have to apply for anything. However, being willing to take on extra responsibility is a great way to make a first impression!
- There are three application spaces, so you can apply for more than one job if you want
- Turn in your job applications as soon as you want. I will tell you who I have “hired” early next week.

# Class Jobs

- Many of you will get the opportunity for jobs. There aren't enough jobs for everyone, but anyone can obviously help out!
- **Paper Passer-Outer (2 spots)**
- **Paper Returner (3 spots)**
- **Homework Collector (1 spot)**
- **Folder Alphabetizer (1 spot)**
- **Homework Writer (Homeroom only) (1 spot)**
- **Special Schedule Writer (Homeroom only) (1 spot)**
- **Whiteboard Material Collector (3 spots, 6<sup>th</sup> period only)**

# 2<sup>nd</sup> Period: Math is...





# 3<sup>rd</sup> Period: Math is...



# 4<sup>th</sup> Period: Math is...



# 6<sup>th</sup> Period: Math is...

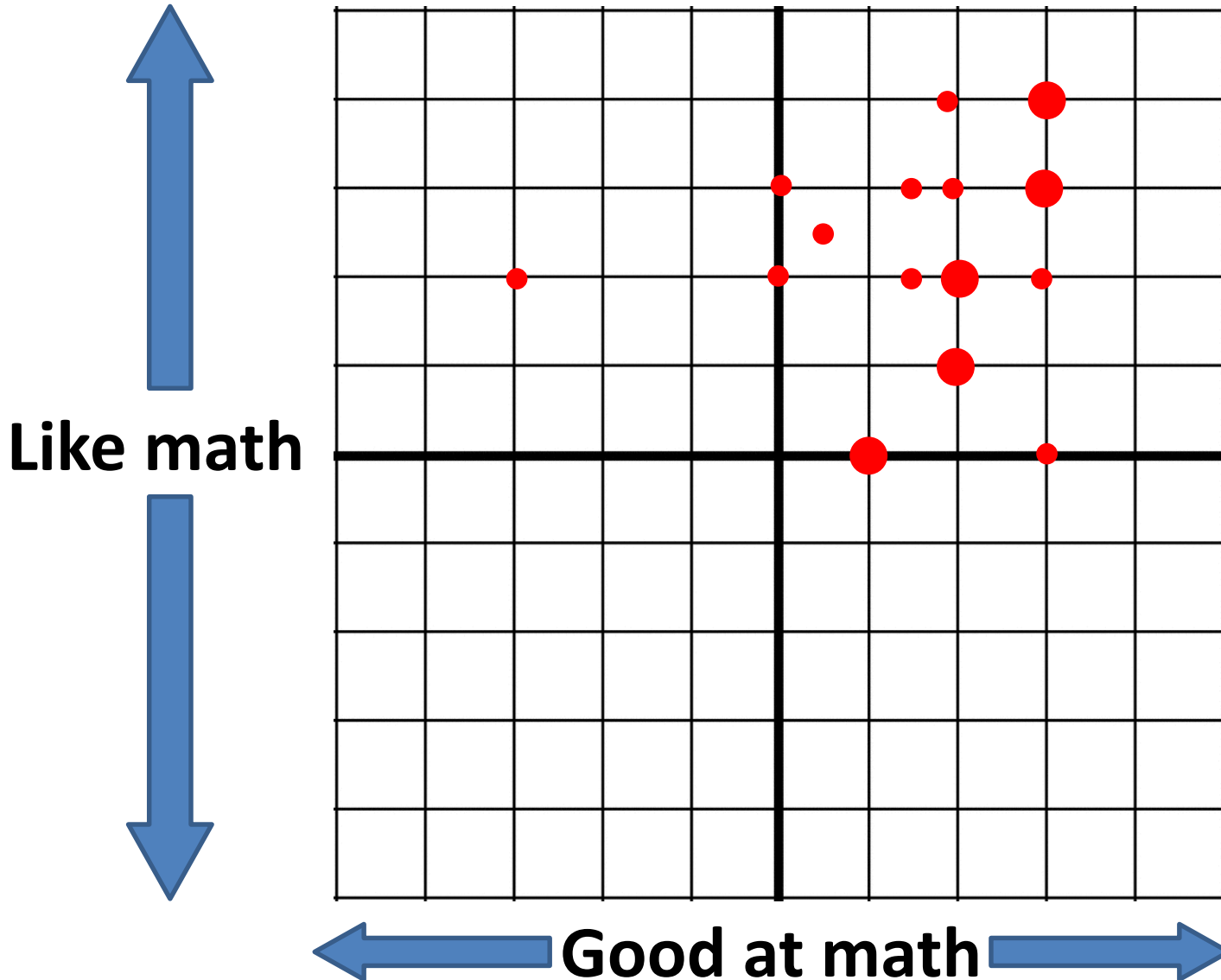
A word cloud of various adjectives and terms related to math, including:

- Challenging
- Interesting
- Frustrating
- Disrespectful
- Effective
- Medium
- Boring
- Troubling
- Confusing
- Hard
- Okay
- Easy
- Difficult
- Good
- Infinite
- Numbers
- Intriguing

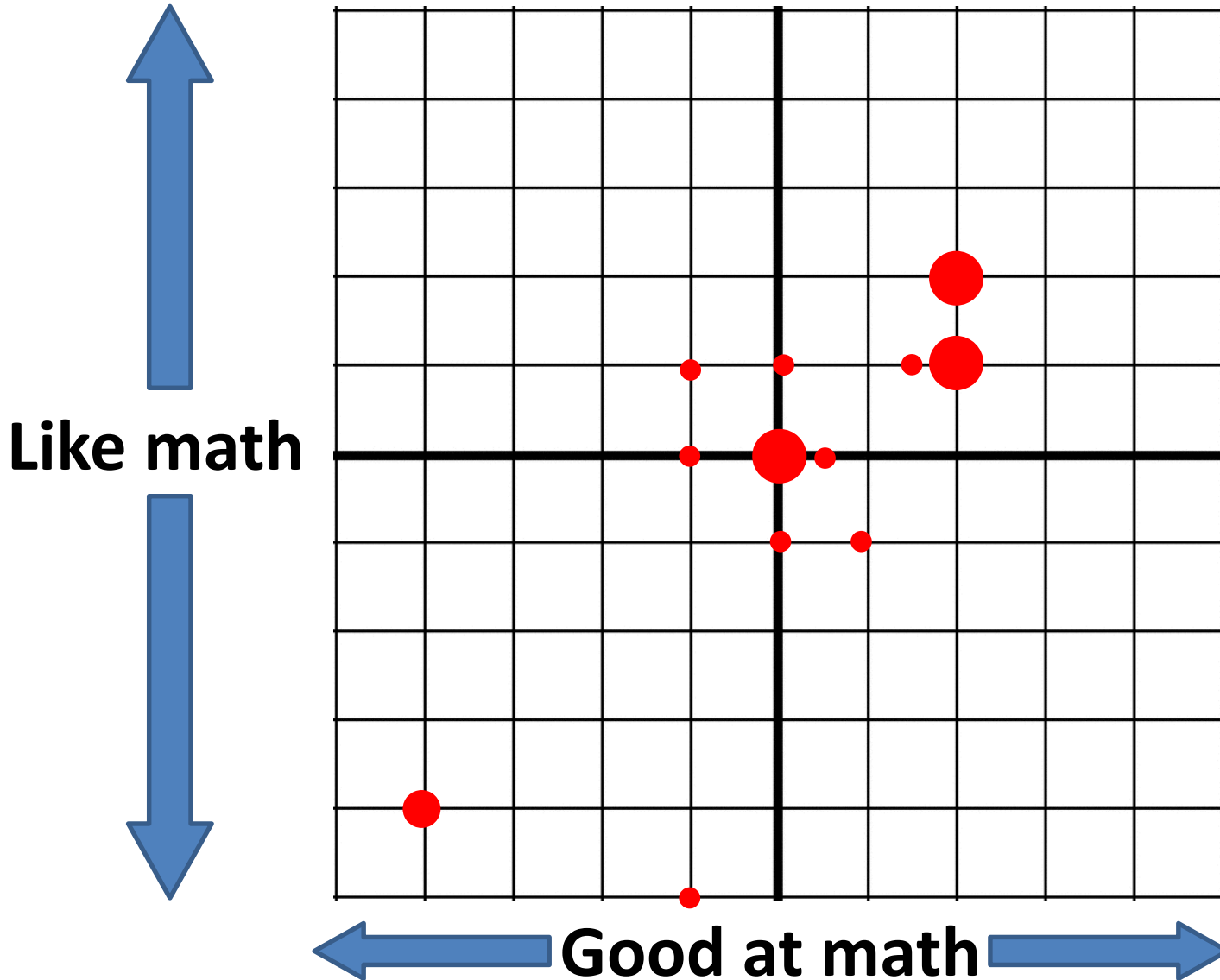
# All Classes: Math is...



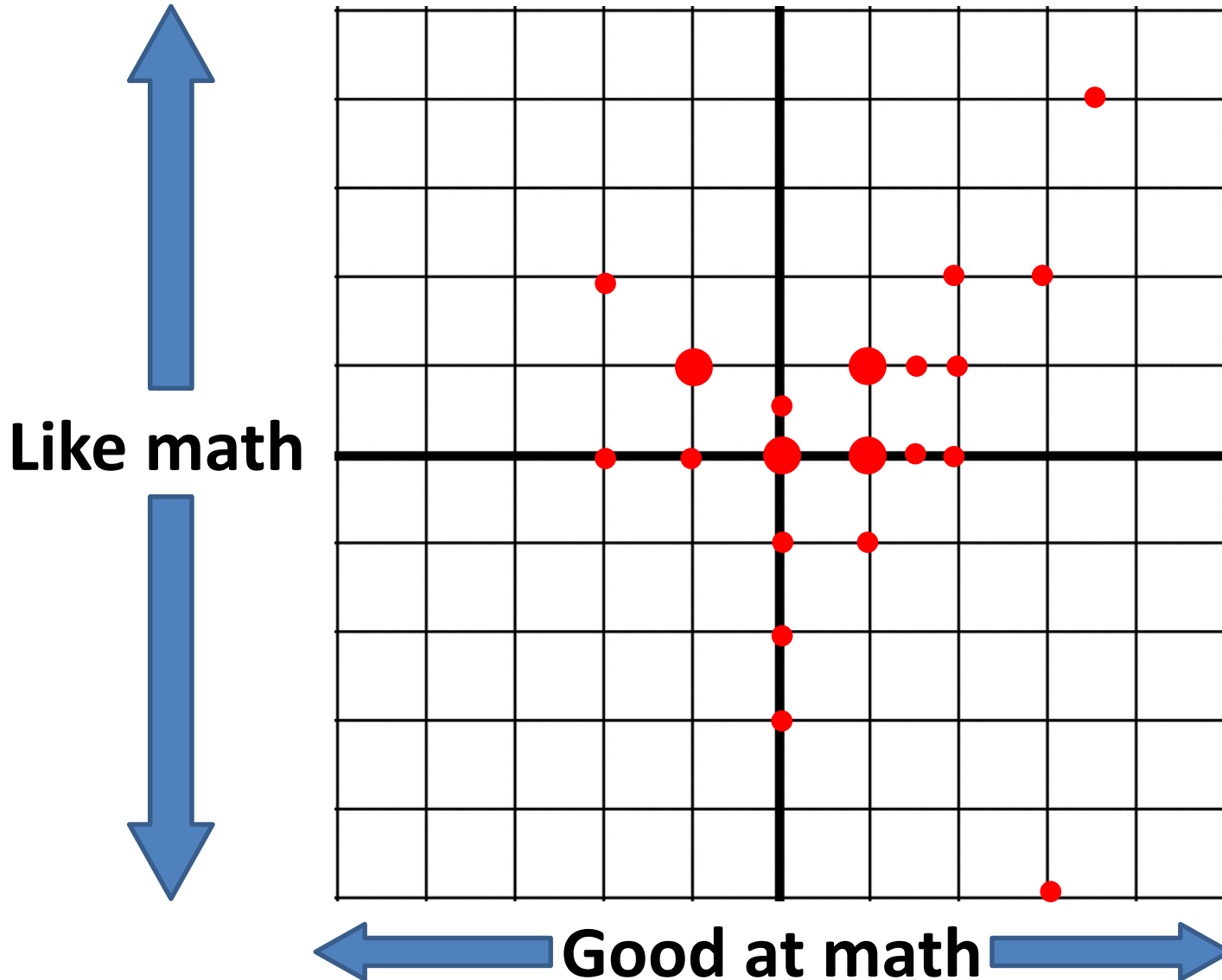
# 2<sup>nd</sup> Period Math Grids



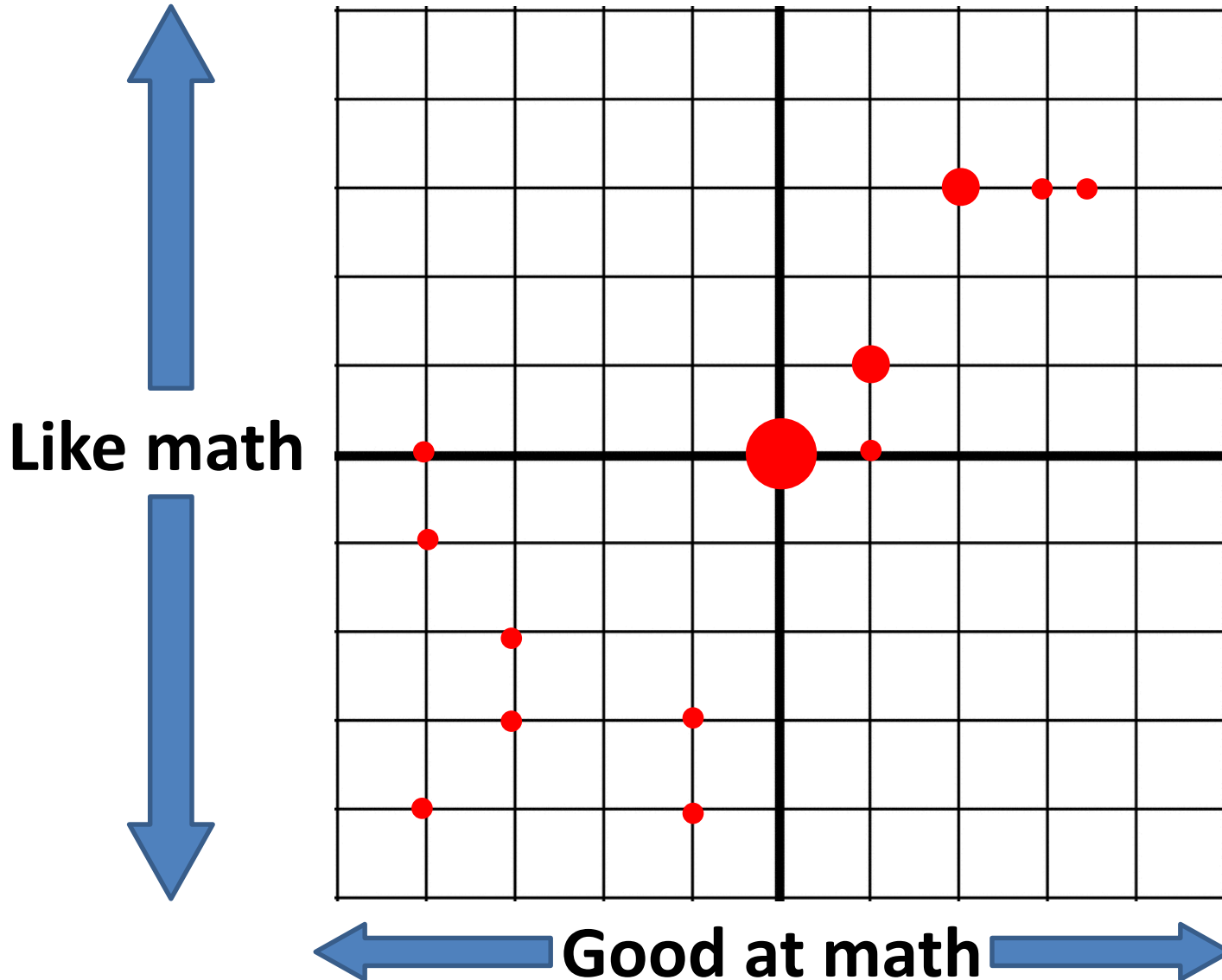
# 3<sup>th</sup> Period Math Grids



# 4<sup>th</sup> Period Math Grids



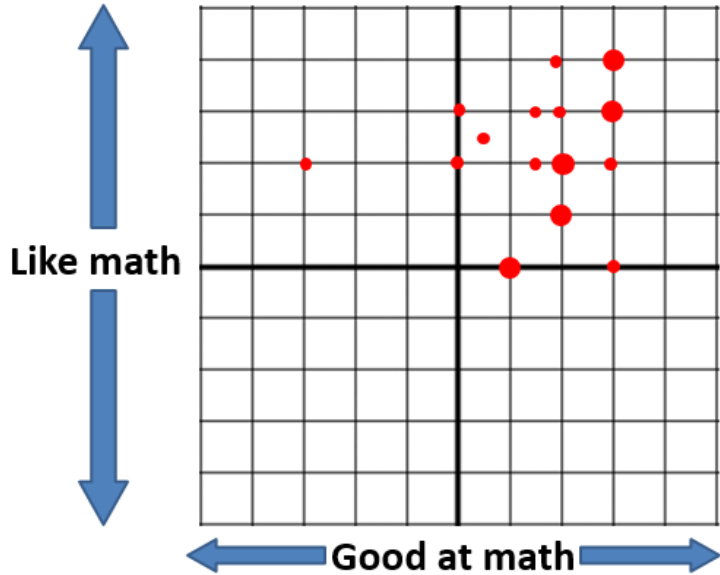
# 6th Period Math Grids



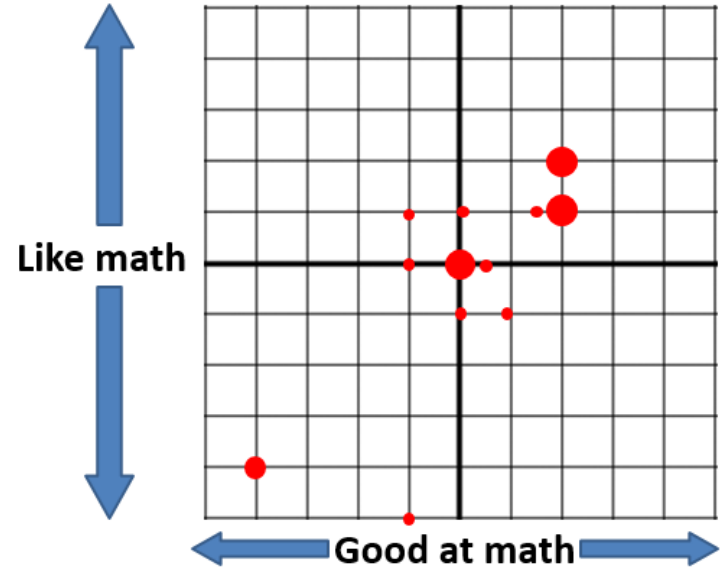


# Comparing them...

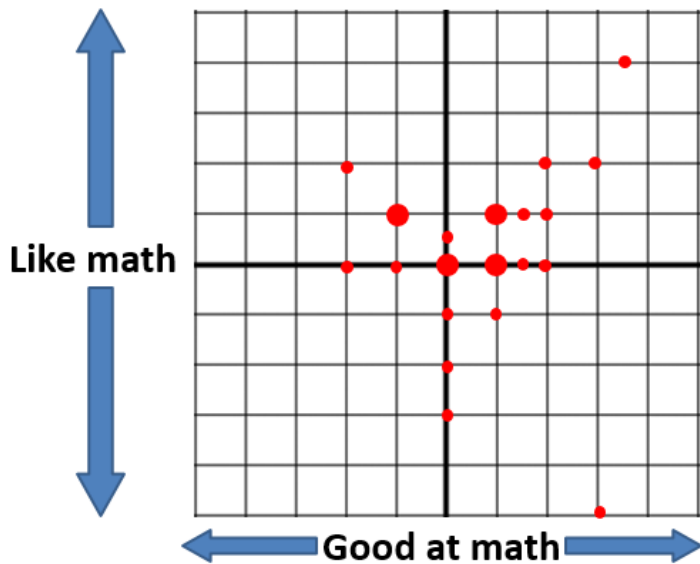
2<sup>nd</sup> Period Math Grids



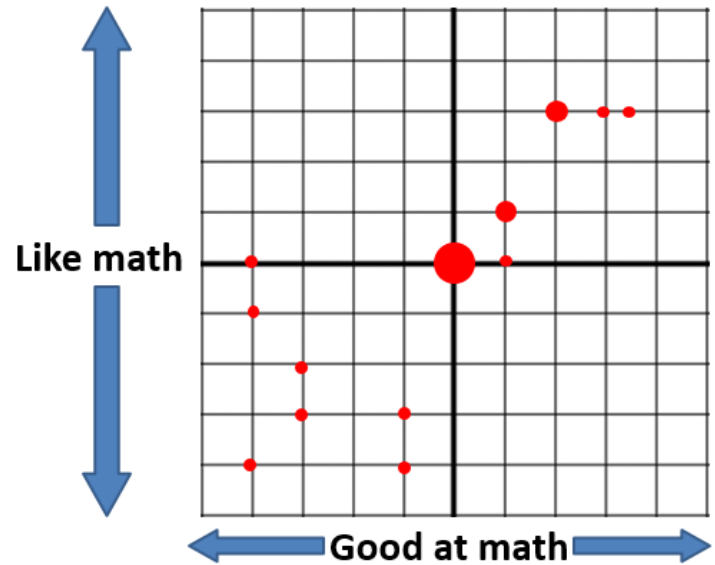
3<sup>rd</sup> Period Math Grids



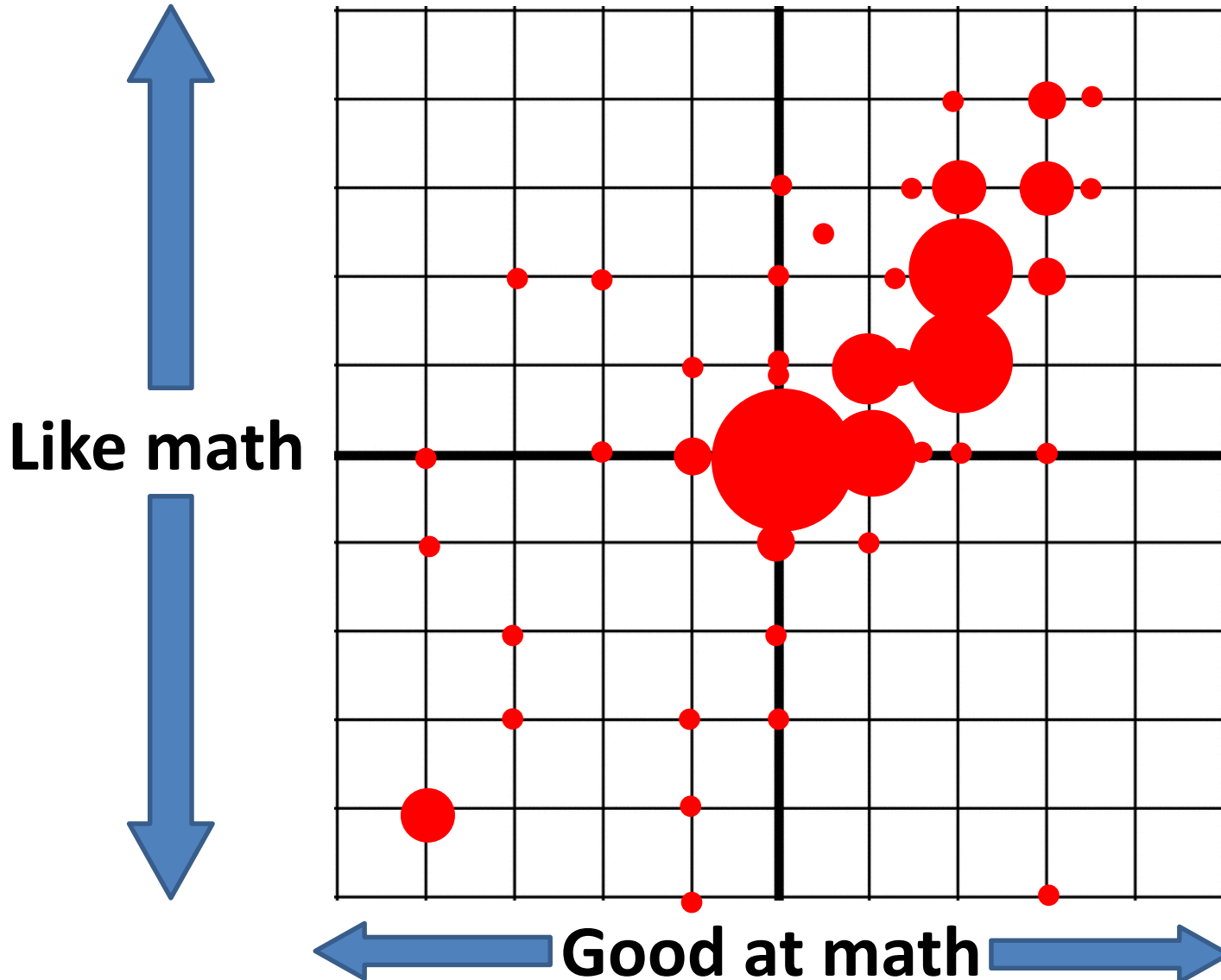
4<sup>th</sup> Period Math Grids



6<sup>th</sup> Period Math Grids



# ALL CLASSES PUT TOGETHER



# About Math

The background features a dark, almost black, upper section with a series of bright, white, diagonal light rays emanating from the right side, creating a sense of depth and movement. The lower section is a solid, dark gray horizontal band.

# Video: “Solving the Math Problem”

- <https://www.youcubed.org/resources/solving-math-problem/>
- As you watch, think about your reaction to the video!

# Creativity in Math

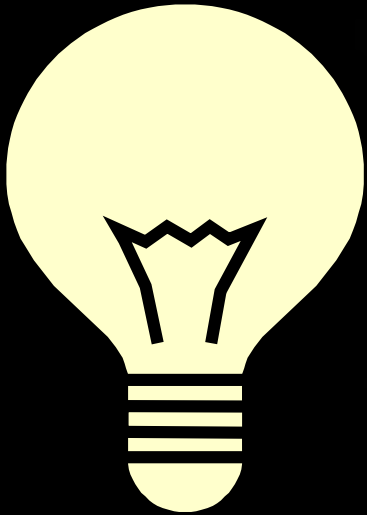
**Some people say: “There’s no room for being creative in math. It’s either right or it’s wrong!”**

**I disagree!**

**Even if there is only one correct answer, there are always multiple methods and ways to think about it. Math is a lot more flexible than people think!**

# Math is satisfying!

Even students who say they “hate math” light up like a lightbulb when they figure out a tough problem.



“Whoa, I get it!!!”

# Math is Problem Solving

Being a good **problem solver** is not just important in the math classroom, but also in your everyday life.

**Problem Solving: What do you do when you don't know what to do???**

In a math problem, what do you think is more important.....

The steps you use to get to the answer...

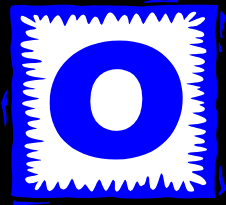
or....

The answer?





The answer is just a number.

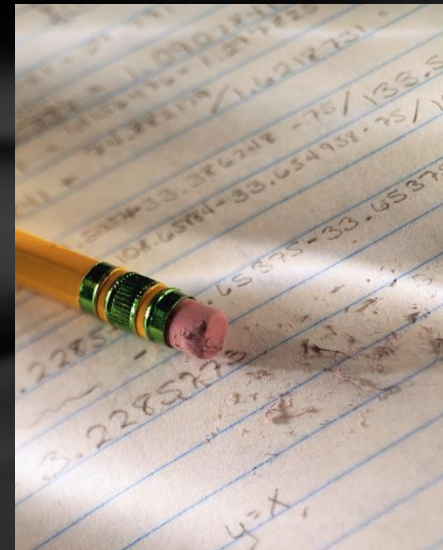


The steps show what you were **thinking** when you did the problem.



# Showing work helps **ME**...

- For this reason, you must show **all your work** when you do problems in this class.



- An assignment or test measures how much you know...so I want to see what you were thinking as you did it!

...and it also helps **YOU!**

Evaluate the expression " $2(3 \cdot 4 - 5)$ "

Student A

$$2(3 \cdot 4 - 5)$$

Student B

$$2(3 \cdot 4 - 5)$$

Student C

$$2(3 \cdot 4 - 5)$$

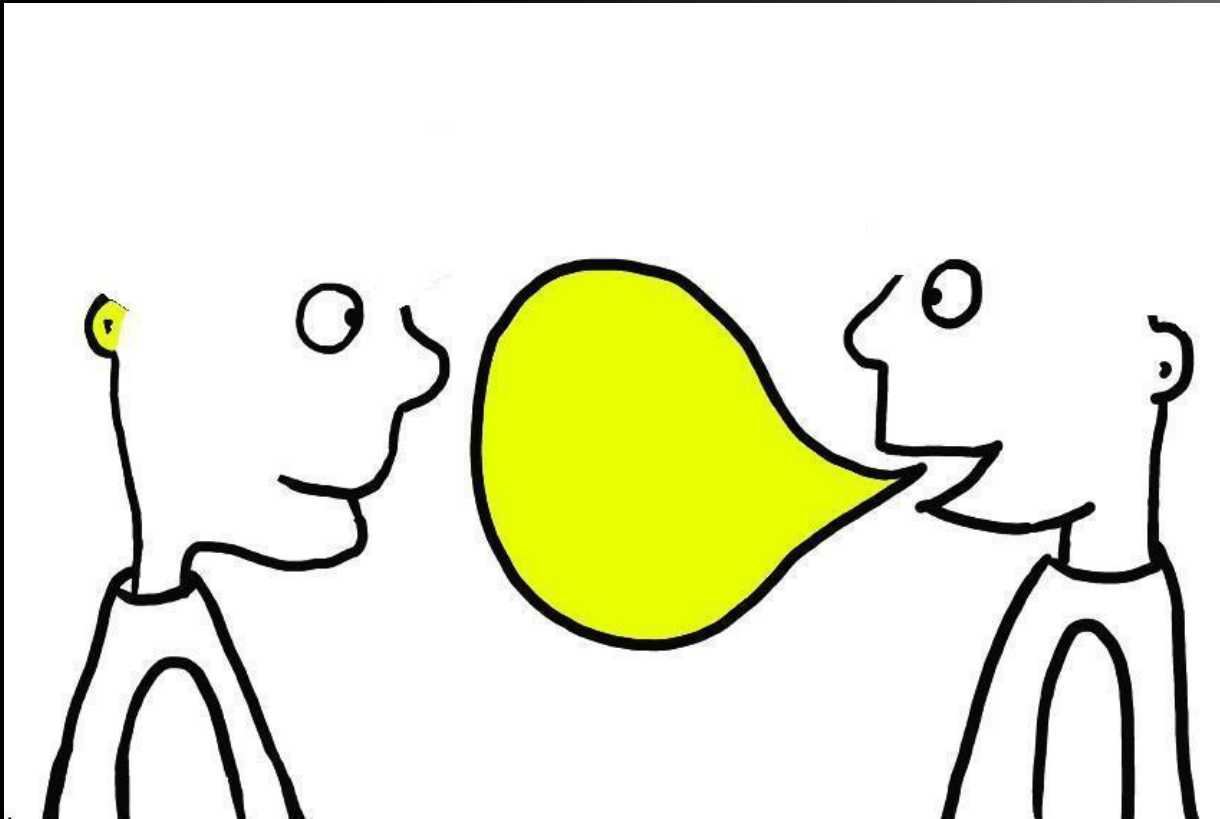
There's no WORDS in math!!!

**WRONG**

- In this class, we will be doing **MUCH** more than just solving problems with numbers.
- We are going to do a lot of **WRITING** about math.
- This could be:
  - Explaining how you did a problem
  - Justifying why an answer is right
  - Explaining a mistake someone made and why they may have made it
  - Comparing two different ways to do a problem

# You will also be **SPEAKING** about math

- We're all in this together.
- If we share ideas back and forth, we will all learn more.



# Speaking in math requires a lot of practice!

A conversation I have had several times...

Me: "Correct! How did you get that answer?"

**Student: "I did it in my head."**

Me: Okay, but how did you do it in your head? What were your steps?

**Student: "I don't know...I just did it!"**

It's actually a lot harder than it seems to explain your thinking out loud. This is something we're going to practice a lot!



# Ask questions!

- ◎ If you don't understand something, ask!
- ◎ I am not one of those teachers who hates being asked questions. Asking questions in class means you want to learn.



The key to understanding math...

**What** you do is not as important as **why** you do it.

The most successful math students are the ones who not only know what to do, but **why you do it!**

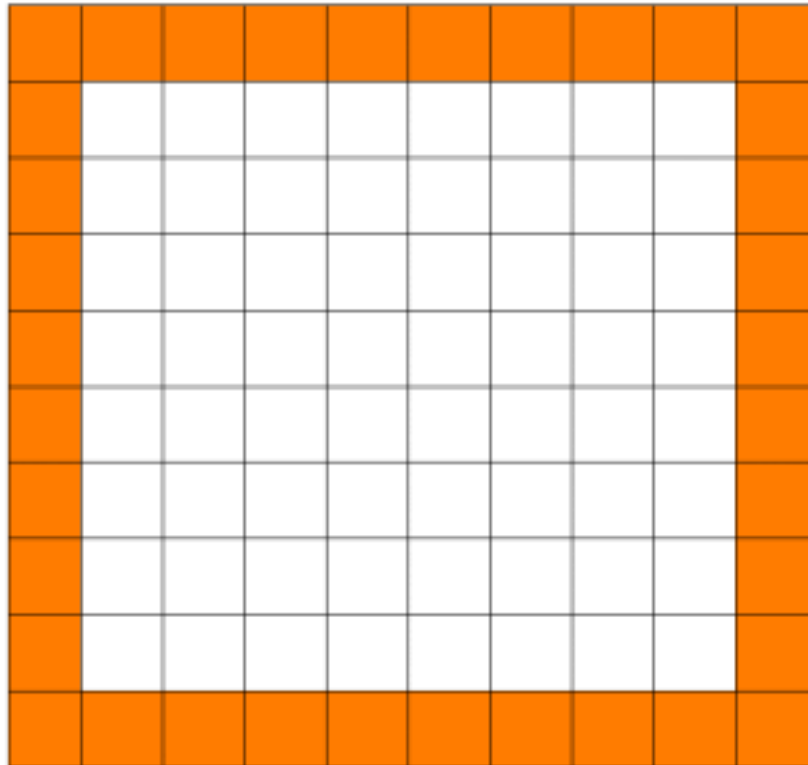
# Last but not least...

- **Math can be pretty amazing and interesting!**

1. Enter the first three digits of your phone number (**not** the area code) into a calculator.
2. Multiply this 3-digit number by **80**.
3. Add **1**.
4. Multiply by **250**.
5. Add the last 4 digits of your phone number.
6. Add the last 4 digits of your phone number again.
7. Subtract **250**.
8. Divide number by **2**.

# Let's do some math!!!

- Here is a 10 by 10 square. WITHOUT TALKING TO YOUR GROUP YET, figure out how many shaded squares there are (without counting them one by one)
- Now, talk to your group and share the different ways you counted them.



- With your group, determine how many shaded border squares there would be in a 30 by 30 square.
- IF TIME: If “ $n$ ” is the number of squares on each side, write a formula that gives the number of border squares.

# Due TOMORROW:

- Job Application
- Please read all the job descriptions again. You may apply for 0, 1, 2, or 3 jobs.