

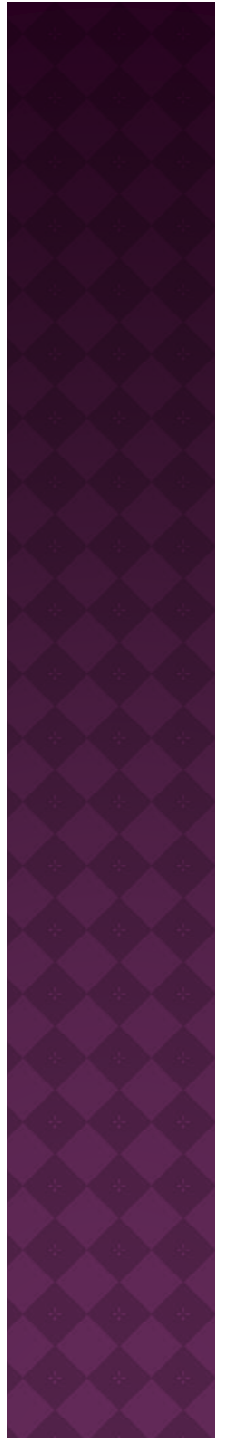
WELCOME TO DYNAMICS OF TRIGONOMETRY AND MATHEMATICAL ANALYSIS

Mr. Ruckdeschel

Mr. "R"

CLASS AGENDA

- ◉ Ice Breaker
- ◉ Class Expectations
- ◉ Working with Functions
- ◉ Closure

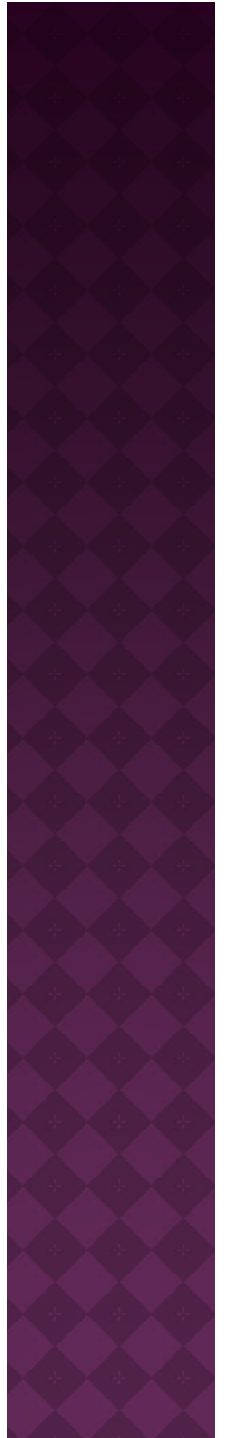


ICE BREAKER



3 THINGS THAT MAKE YOU UNIQUE

- ⦿ Talk with the person you are sitting with for 2 minutes
- ⦿ Discuss 3 unique things about you
- ⦿ Introduce your partner to the class
- ⦿ Pick one of the three things about your partner to share with the class

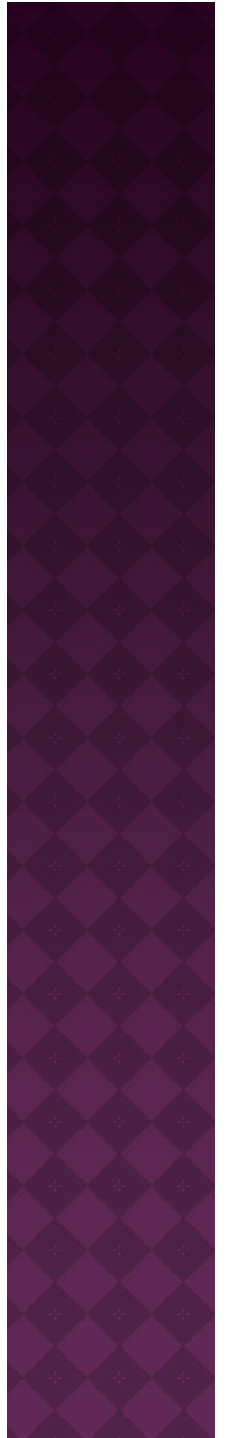


CLASS EXPECTATIONS



EXPECTATIONS

- ◎ EVERYONE CONTRIBUTES TO THE SUCCESS OF CLASS
- ◎ EVERYONE WILL BE PREPARED FOR CLASS
- ◎ EVERYONE WILL PRODUCE ORIGINAL WORK
- ◎ IF YOU NEED HELP, ASK



GRADING

○ **Class Participation 10%**

- Be on time and prepared for class **EVERYDAY** with your student ID, a notebook, folder, graphing calculator, charged iPad, and a sharpened pencil. Failure to bring these supplies to class will be counted against your class participation grade. **PENCILS ARE REQUIRED FOR TESTS/QUIZZES.**
- Be a participant, not an observer.
- Always be able to produce any unchecked assignments.
- Observe all school rules, especially those involving cell phones, electronic devices, and dress code.

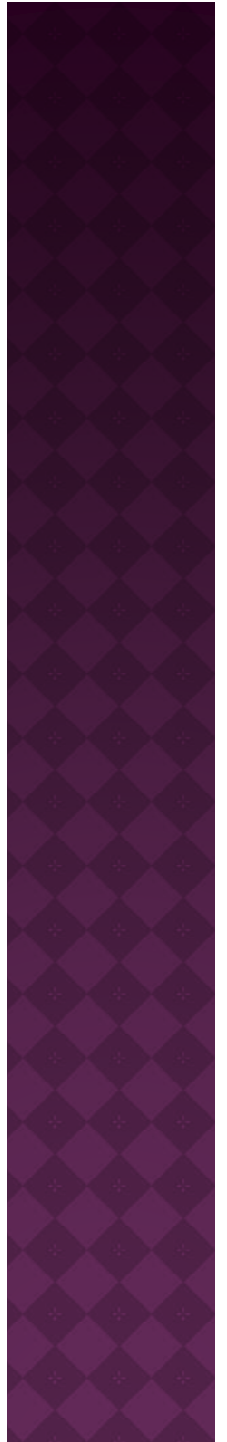
○ **Homework & Classwork 25%**

- Homework and Classwork will be assigned daily and checked regularly.
- Computer/iPad labs and projects may be graded as classwork or as a quiz.
- All work must be shown to receive full credit.
- It is your responsibility to be current with all assignments when class is missed for any reason.
- Homework may not be made up (for credit) unless absent.

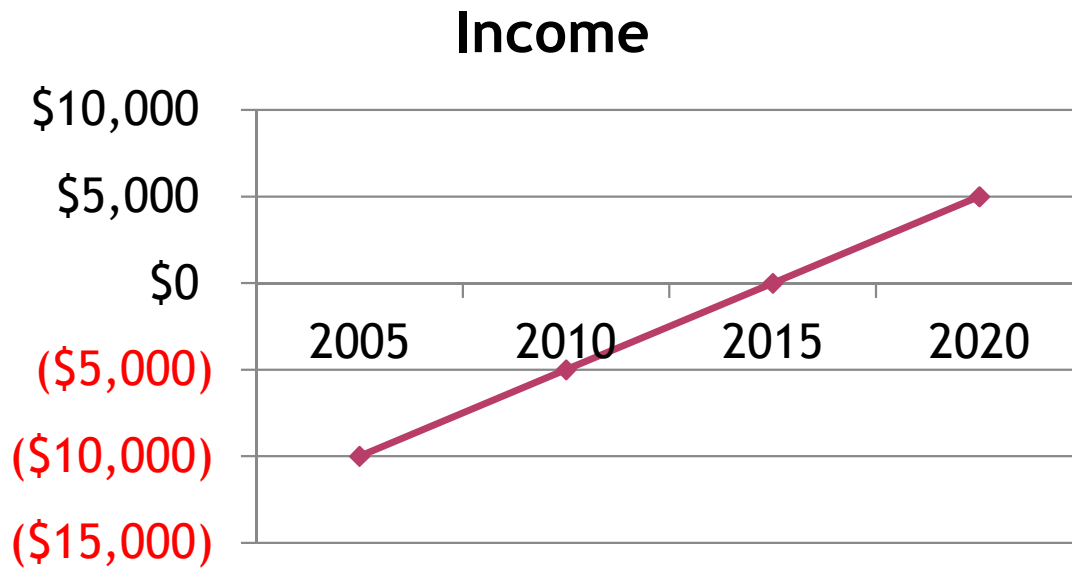
○ **Tests, Quizzes, and Projects 65%**

- Assessments will be given in the form of quizzes, unit tests, projects, and cumulative assessments.
- Tests, projects, and cumulative assessments will be announced and will be worth twice as much as quizzes (unless stated otherwise)
- Quizzes may be given at any time (announced or unannounced)
- If you are absent the class **before** the assessment, you are **required** to take the assessment on the scheduled day.
- If you are absent the class **of** the assessment, you are **required** to take the assessment on the day you **return** to school (please make arrangements with me to schedule a time to do so).
- If you are absent for a review and the assessment, you must take the assessment within one day of your return to school.
- *Any assessment that is not made up in the allotted time will receive a grade of 0.*

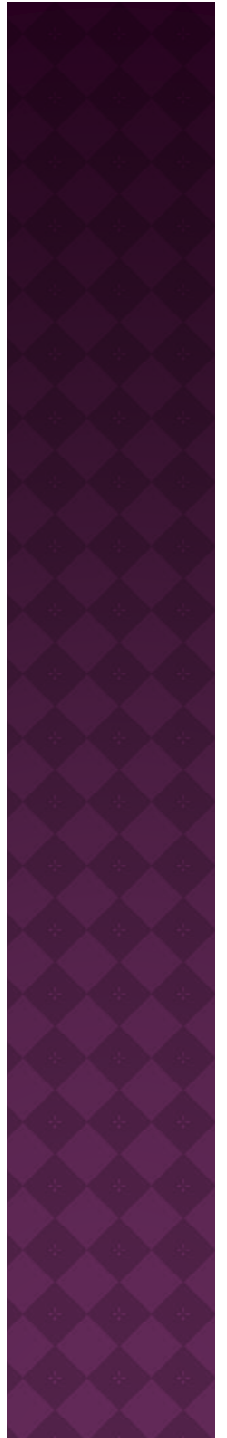
LINEAR EQUATIONS



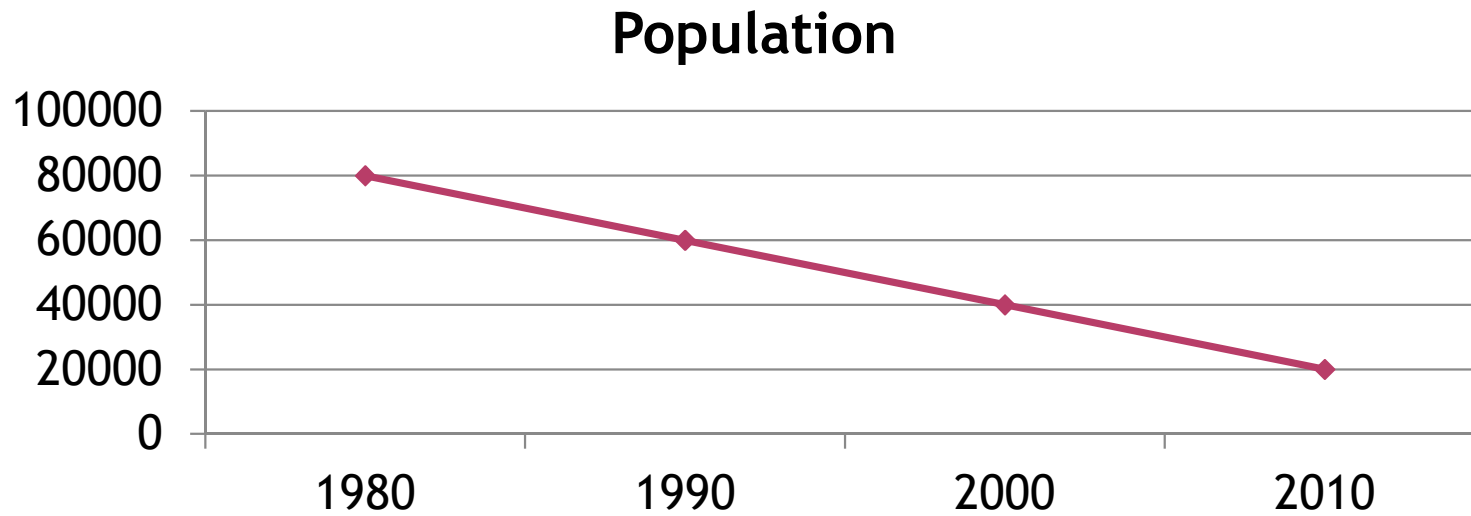
LINEAR GRAPHS



- ⦿ What was the initial investment?
- ⦿ What is the “break even” point?



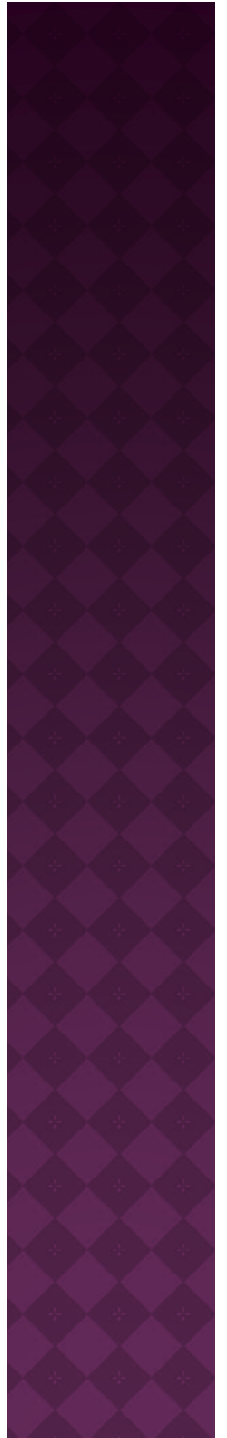
LINEAR GRAPHS



- ⦿ What was the population in 1980?
- ⦿ What was the population in 2010?

LINEAR GRAPHS

- ◉ Given: $y = -2x + 4$
- ◉ What does this graph look like?



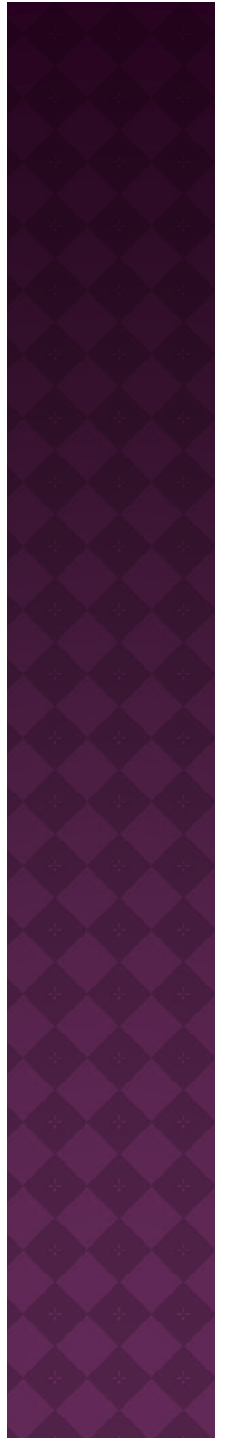
STANDARD FORM VS SLOPE INTERCEPT FORM

⦿ $ax + by = c$

⦿ $y = mx + b$

⦿ $2x + 3y = 6$

Write in Slope intercept form



PARTS OF A LINEAR EQUATION

- $Y = mx + b$

- $Y = 3x + 7$

- $Y = -2x + 8$

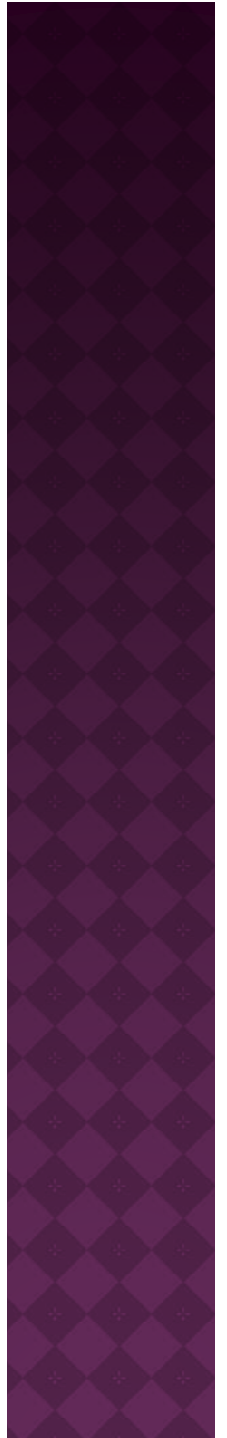
- $Y = -4x - 6$

- $Y = (2/5)x + 5$

- Intercepts

- x-intercept?

- y-intercept?



PARTNER ACTIVITY

- ⊙ Work with your partner
- ⊙ Identify
 - x and y intercepts
 - Slope
 - Write in slope intercept form
 - Write in standard form
 - Graph the equation

1. $y = x + 3$

2. $y = (1/2)x - 4$

3. $x + y = 5$

4. $2x + 3y = 4$

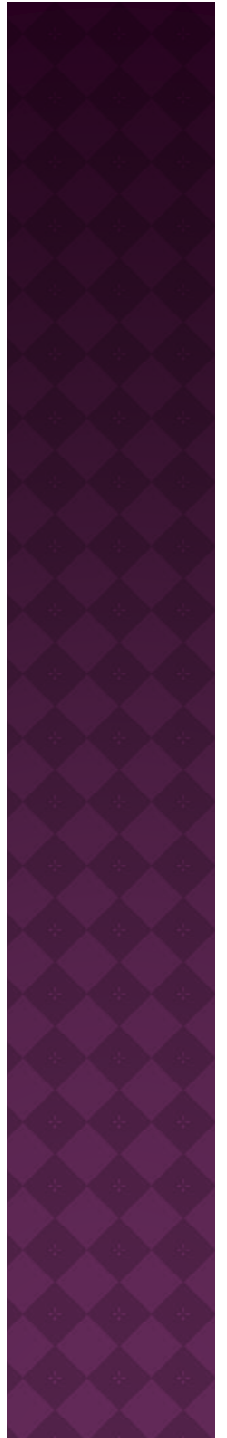
5. $(2/5)x + (5/2)y = 5$

CLOSURE



CLOSURE

- ◉ Exit ticket - Reflection
- ◉ Reflect on what you learned today and create an equation in standard form.
 - Write this equation in slope-intercept form
 - Identify the x and y intercepts
 - Identify the slope
 - Graph the equation



HOMEWORK

- ◉ Summer packet is due next class.
- ◉ Quiz on Summer Packet will be on Wednesday, September 18th.
- ◉ Class questionnaire is due by next class (includes review of course description and grading policy) it is on the wiki:
- ◉ Ruckdeschel.pbworks.com