

1. Expectations



- a) Respect the rights of others.
- Only **ONE** person speaks at one time.
 - No profanity or suggestive language/actions.
 - Communicate with the teacher. Tell me in advance if you cannot fulfill your requirements.
 - Contribute to the conversations and do not be afraid to make comments or ask questions.
- b) Come prepared to learn and expect to be challenged.
- Expect daily assignments emphasizing knowledge application. Typically, examinations will be in word problem form, require “problem-solving” type solutions, and be either all or partially take-home.
 - In all assignments, provide detailed, quality work. Remember to demonstrate your thought process by **SHOWING ALL WORK**. This is the largest part of your grade. Since neatness, organization, and presentation facilitate a logical thought process, these traits count for the remainder of your grade.
 - Advanced courses may require rigorous computer projects utilizing MS EXCEL (Google Sheets), WORD (Google Docs), and/or Desmos applications.
 - Calculators are typically not permitted for tests or quizzes in Pre-Algebra or Algebra 1 courses. TI-84 calculators are available. Note: AP students are permitted to use DESMOS in addition to an approved calculator on the AP Exam.
 - Bring required text(s), notebooks, and paper (no spiral) to every class. **USE PENCIL ONLY.**
 - **Maintain a dedicated 3-ring binder for this course exclusively.** This binder must have dividers (for division by textbook modules) and will be graded periodically (about every 4 weeks). For non-AP courses, notebooks are usually permitted for quizzes and tests. Subsequent instructions will provide specific instructions on how to organize your student notebook.
 - Graded assignments must show all work, and answers must be **double underlined**.
 - Expect to develop your public speaking skills. If feasible and selected at random, **ALL** students will orally present their homework assignments to the class using the blackboard. Presentations are evaluated on both content and performance.

2. Grading Scheme

Typically, grades will be computed and printed according to the scale shown below and given to the student ABOUT every 3 weeks. *Technology permitting*, grade reports will concurrently be transmitted electronically to parents and be available on the web via IC (Infinite Campus). This paper report should be signed by a parent and returned for a 10-point grade. The teacher will enter into IC a minimum of two (2) graded assignments per week (typically quizzes). Students will be provided with an online course syllabus near the start of school, which will clarify instructional topics day by day as best I can predict. Students will be provided a packet containing **additional** instructions/requirements for the course shortly after instruction begins. This packet should be included as part of their notebook.

From time to time, students may be expected to access **Google Classroom**, **textbook website(s)**, and/or my website (at: www.markeredwards.com) for syllabi, assignments, course description(s), problem/data sets, examples, special assignments, etc.

Evaluation	Typical Course Value
Chapter Tests	100 points
Quizzes/Notebooks	30 points
Laboratories/Projects	50 points
Assignments/Boards	10-20 points

Grade	% Scale
A	100% - 90%
B	90 % - 80%
C	79% - 70%
D	69% - 60%
F	< 60%

3. Errors and Assistance

I am not perfect and will make mistakes. But I will endeavor to correct any errors and be absolutely fair and objective in my grading. I will do whatever it takes for you to be proficient in the material and pass the course/AP exam. I love mathematics, science, and engineering.

For assistance with homework, projects, etc., ***contact me anywhere, anytime.***

- My mobile = 719.429.1539.
- Personal e-mail: = mheinen_1@msn.com
- School email = mheinen@re-2.org
- Additionally, I am typically available after school for additional instruction.

Student Signature: _____

Parent Signature: _____

Have this sheet signed and retained in your notebook. This page should be the first page of your notebook protected in a clear document protector.

Heinen, M.

Put your name here on the top, inside corner.

Write your names on submitted papers:
Last name, First initial

ONLY math materials in this notebook.
No doodling on or in the notebook.


Nothing in notebook pockets when submitted for grade. Everything in its proper place within the dividers.

Heavy duty 3-ring binder 1.5 inches thick.
Professional color: black, gray, white, blue, dark green, etc. to be kept in perpetuity!

1	2	3	4	5	6	7	8	9	10	11	12			
---	---	---	---	---	---	---	---	---	----	----	----	--	--	--

Class Handouts
Florence HS

Mr. Heinen Class
Print Date: 8/9/2022



1. Expectations

a) Respect the rights of others

- Only **ONE** person speaks at a time.
- No profanity or suggestive language/actions.
- Communicate with the teacher. Tell me in advance if you cannot fulfill your requirements.
- Contribute to the conversations and do not be afraid to make comments or ask questions.

b) Come prepared to learn and expect to be challenged

- Expect daily assignments emphasizing knowledge application. Typically, examinations will be in word problem form, require "problem solving" type solutions, and be all or partially take home.
- In all assignments, provide detailed, quality work. Remember to demonstrate your thought process by **SHOWING ALL WORK**. This is the largest part of your grade. Since neatness, organization, and presentation facilitate a logical thought process, these traits count for the remainder of your grade.
- Advanced courses will require rigorous computer projects utilizing MS EXCEL and/or Mathcad®, etc. applications.

First 3-6 pages in document protectors

Graded assignments must show all work and answers must be undotted.

- Expect to develop your public speaking skills. Selected at random, **ALL** students will orally present their homework assignments to the class using the blackboard. This presentation will be graded for content and presentation.

1.50 in

The Greek Alphabet

- Alpha - A α Beta - B β Gamma - Γ γ Delta - Δ δ Epsilon - E ϵ Zeta - Z ζ
- Eta - H η Theta - Θ θ Iota - I ι Kappa - K κ Lambda - Λ λ Mu - M μ
- Nu - N ν Xi - Ξ ξ Omicron - O \omicron Pi - Π π Rho - P ρ Sigma - Σ σ/ς
- Tau - T τ Upsilon - Y υ Phi - Φ ϕ Chi - X χ Psi - Ψ ψ Omega - Ω ω



Problem Solving Steps

(tattoo these on your arm)

**1. Read / Study / Investigate the Problem.
WHY?**

2. Draw a sketch.



3. Define the variables on the sketch.

4. Write the equations or inequalities.

**5. Solve the equations or inequalities.
GIVE THE ANSWER!**

6. Check your work! – WHY??

\$300 per hour

\$20 per hour

Past, Present and Future Value of Money

Huskies remember the time value of money! Accept no other substitute!

Symbol	Meaning	Amount (in example)
P	Present Value (What the money is worth right now)	\$1,000,000
A	Annual Value (What the money is worth in annual payments)	\$50,000
F	Final Value (What the money will be worth at some future date)	\$2,000,000
i	Interest (an estimate of how fast the money can grow in some relatively safe investment).	5%
n	Number of years (Duration over which an investment is made).	5 years

These parameters are related to each other through standard engineering formulas, which are equations came from and how they are used in engineering economics problems.

	Find	From	Discrete Payments, Discrete Compounding	Discrete Payments, Continuous Compounding	Continuous Payments, Continuous Compounding
Single Payment	F	P	$F = P(1+i)^n$	$F = Pe^{in}$	$F = Pe^{in}$
	P	F	$P = F/(1+i)^n$	$P = F/e^{in}$	$P = F/e^{in}$
Equal-Payment Series	F	A	$F = A \left[\frac{(1+i)^n - 1}{i} \right]$	$F = A \left[\frac{e^{in} - 1}{e^i - 1} \right]$	$F = A \left[\frac{e^{in} - 1}{e - 1} \right]$
	A	F	$A = F \left[\frac{i}{(1+i)^n - 1} \right]$	$A = F \left[\frac{e^i - 1}{e^{in} - 1} \right]$	$A = F \left[\frac{e^i - 1}{e^{in} - 1} \right]$
	P	A	$P = A \left[\frac{(1+i)^n - 1}{i(1+i)^n} \right]$	$P = A \left[\frac{1 - e^{-in}}{e^i - 1} \right]$	$P = A \left[\frac{e^{in} - 1}{e^{in} - 1} \right]$
	A	P	$A = P \left[\frac{i(1+i)^n}{(1+i)^n - 1} \right]$	$A = P \left[\frac{e^i - 1}{1 - e^{-in}} \right]$	$A = P \left[\frac{e^{in} - 1}{e^{in} - 1} \right]$
Gradient Series	A	G	$A = G \left[\frac{1}{i} \frac{n}{(1+i)^n - 1} \right]$	$A = G \left[\frac{1}{e^i - 1} - \frac{n}{e^{in} - 1} \right]$	
	P	F_1	$P = \frac{F_1}{1+i} \left[\frac{(1+i)^n - 1}{i} \right]$		