

## Trigonometry/Pre-Calculus

Port Allegany High School

Classroom 28

Instructor – Mrs. Francis

Phone – 642-2544 ext 128

### TEXTBOOK – *Precalculus – Mathematics for Calculus*

Please bring this book to class everyday with a book cover.

### TRIG/PRE-CALCULUS TOPICS:

- **Reviewing fundamentals from prior courses:**
  - Real numbers
  - Exponents and radicals
  - Algebraic expressions
  - Fractional expressions
  - Equations
  - Coordinate geometry
  - Polynomials and Rational Functions  $\rightarrow P(x) = -2x^4 - x^3 + 3x^2$
  - Exponential and Logarithmic Functions  $\rightarrow f(x) = e^x$
- **Inequalities and systems of inequalities**  $\rightarrow y < 3x - 8$  and  $|x - 5| \geq 4$
- **Functions**  $\rightarrow f(x)$  – a rule that describes how one quantity depends on another
- **Trigonometric Functions of Real Numbers**  $\rightarrow \sin t, \cos t, \tan t, \csc t, \sec t, \cot t$
- **Trigonometric Functions of Angles**  $\rightarrow \sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$
- **Analytic Trigonometry**  $\rightarrow$  trigonometric equations (i.e.  $\sin^2 x + \cos^2 x = 1$ )

### ASSIGNMENTS:

Mathematics is not a spectator sport. In order to learn new skills and be successful, you must practice. If you want to become proficient in math, you must **DO YOUR WORK** (Practice assignments in or out of class). You should expect daily math assignments. A score of 5 points is possible to earn for every practice assignment. Students' assignments will usually be checked the following day. The following heading must be on the top of all assignments to receive any credit. Original problem and all necessary work must be shown to receive full credit (single answers will not suffice). Students should correct their work/problems in class as assignments are reviewed. We will also use a variety of post-its for corrections of problems. Accuracy assignments will be given after two or three days of similar lessons. This will be graded for correctness of work and final solution.

TRIG Period	First and Last Name
Page and problem #'s	Date

### NOTEBOOKS/BINDERS:

Students will **KEEP** a NOTEBOOK containing classroom notes, examples, and any additional side notes. **ORGANIZATION** is one of the keys to success in mathematics. Notebooks are for notes not assignments for your benefit. When asking for help outside of class, notebooks must be present with appropriate sections of notes. Students will keep all assignments (book work and worksheets) in a binder along with their class notes. Binders will be checked quarterly at minimum.

### GRADES:

Grades are determined by accumulated points from practice problems, accuracy assignments, binder checks, quizzes, projects, and class participation. The grading scale is consistent with the one found in the student handbook. **MAJOR QUIZZES** are given after every section is completed and will be announced at least two days in advance but pop quizzes may also be given. All math work will be completed in **PENCIL** to avoid messy, unreadable work. If I need a road map to follow your work, the problem will be considered wrong. A mid-term will be given at the end of the first semester on the topics from the first two quarters. A final will be given at the end of the second semester on the topics from the last two quarters.

The final quarter grade will consist of the following possible scores:

200-240 Points	Announced/Pop Quizzes
150-200 Points	Practice & Accuracy Assignments
80-100 Points	Projects/Miscellaneous
Approximately 460-590 Points per Quarter	

### ABSENTEEISM:

If you have been ABSENT, if possible please find out before coming to class what notes, assignments, quizzes, etc. you have missed. If you are absent only the day of a test or quiz, you will take it the next day that you are available to make up the test during your study hall or before/after school. The make-up tests will not be given during class time, since you will get behind on that day's lesson. If make-up tests are not completed within 5 days after the day of test, **the score will be a zero**. If you know you are going to be absent from class due to appointments, athletics, meetings, or other school related functions, please see me ahead of time. **YOU ARE RESPONSIBLE** for coming to me to ask for the work that you have missed and to turn in assignments on time. There is a weekly assignment board located in the classroom.

Students are expected to be in your seat and ready to begin class when the bell rings. Do not congregate in the doorway or anywhere else. Books should be open to the proper pages, and practice assignment should be on desks ready to review. Be prepared to ask questions, complete problems on the board, and participate in class activities. Remember your PANTS for class every day:

Pencil Assignment Notebook Textbook Scientific (Graphing) Calculator

### EXTRA HELP:

If you need extra help or tutoring **DO NOT WAIT**, ask for help early and often. You may seek extra help from me before or after school or 7<sup>th</sup> period (12:06 – 12:48 pm). I would also encourage you to ask other math teachers or classmates for assistance. Also, math tutoring is available in the Lab 34 during morning homeroom (8:00 – 8:30 am) Monday - Thursday.

Thank you for your cooperation and effort throughout the upcoming year. You begin with an "A," your job is to work towards keeping that grade by paying attention in class, completing the given assignments, and reviewing/practicing problems daily. If you put forth the effort, you can and **WILL** succeed in the course!!

Sincerely,

Mrs. Francis