Geometry

9th Grade

Teacher: Miss Wiltjer

Course Description:

Geometry is more than the simple studying of shapes; it is the in-depth analysis of shapes and the start of a structured and logical approach to proving an argument. In this course, we will approach Geometry from a proof-writing point of view most often. It is not enough to simply state an idea, one must prove it to be true. We will work out of the Holt Geometry textbook.

Course Overview:

We will focus on the following topics:

- Points, Lines, Planes and Angles
- Connecting Reasoning and Proof
- Using Perpendicular and Parallel Lines
- Identifying Congruent Triangles
- Applying Congruent Triangles
- Exploring Quadrilaterals
- Connecting Proportion and Similarity
- Analyzing Circles
- Coordinate Geometry
- Loci and Coordinate Transformations
- Basics of Trigonometry

Class Materials:

Each student will need the following items each day:

- 1 folder or binder
- A notebook
- Loose-leaf paper
- Graph paper
- Pencils
- Red Pen
- Ruler, compass, and protractor

Your Responsibilities:

1. Take notes in class and keep them organized.
2. Do your daily homework and keep it organized.
3. Organize your time when preparing for quizzes or tests.
4. Keep your graded quizzes and tests.
5. Participate in class discussions, problem solving sessions, and journal writing.
6. Form and participate in a study group of 1 or (at the most) 2 other people in this class.
7. Avail yourself of math tutoring (as necessary).

Student Evaluation and Grading

Every student at CPA is evaluated according to the following criteria:

1. Sense of Wonder and Depth of Inquiry
   Your Sense of Wonder and Depth of Inquiry will be demonstrated through the questions you ask, the explanations you give, and the level of the work you submit. Often, your participation in the course will be enough to determine how much wonder and at what depth of inquiry you have performed. Participation includes your verbal responses, the questions you ask during class, as well as any work on projects or class problem-solving.

   Participation *does not* include getting the "right" answer. Your participation may (and often times will) include wrong answers or ideas that are not quite on the right track to a solution. Do not be afraid to voice these ideas and opinions, but also do not fear changing your ideas and opinions based on the feedback from others.

2. Basic Understanding of the Subject Matter
   Basic understanding will be determined by performance on:
   - homework,
     Homework is assigned almost every night. Assignments come from the textbook, practice workbook, and/or worksheets that may be prepared by the teacher. We discuss the homework in class, together, and it is due after discussion.
     Homework turned in within the week it is due, but not on the date it is due will be worth only 80% of its original value. Homework turned in after the week it is due will be worth 50% of its original value.

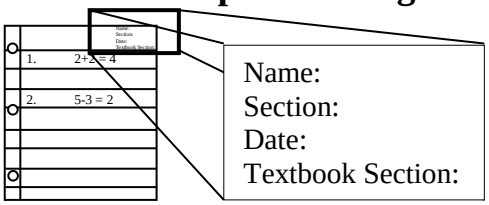
     It is the student's responsibility to get their homework assignment for the day. If a student is not in class, he/she should get the assignment from another student, or refer to Miss Wiltjer's website to get the assignment.

     Homework assignments need to be completed by the individual student. No work should ever be turned in that is not your own. Discussing concepts and procedures with other students is fine so long as solutions come from the individual student.

     The following procedures relate to daily homework:
     a) Homework should be done in *pencil only*.
        Homework done in pen is not accepted.
     b) Clearly identify problem numbers.
     c) Write the original problem or given information as the first line of the problem.
     d) Show your work, step by step.
     e) Place a box or circle around your answer. Alternatively, you may choose to highlight your answer in yellow highlighter.
     f) Skip a line after each problem.
     g) Complete all homework on loose-leaf paper and remove it from your binder (do not rip it out).
     h) You will grade your own homework. Use a grading pen (red pen) to circle incorrect answers, to write correct answers, and to tally the number incorrect at the top of the first page.
     i) If you are working on a worksheet, you do not need to recopy the problem. If there is not enough room on the worksheet to show your work, use a separate piece of paper.

j) I will give you full credit for your homework if it meets the above criteria and if it is:
   i. complete with the correct problem set (C)
   ii. the problems are copied (P)
   iii. work is shown for each/most problems (W)
   iv. all problems have been attempted (A)
   v. and it has the appropriate heading on it (H)

Proper Heading and Problem Formats:



- quizzes,
  Quizzes will be short, 10-15 minute quizzes that will be given periodically to assess how much students are assimilating and understanding new material.
  All quizzes will be pop quizzes.
  Missed quizzes due to excused absences will need to be made up by the student.
  It is the student's responsibility to make time to meet with the teacher to schedule a make-up quiz. Make up quizzes need to be completed the day a student returns to school (in most cases).
- tests
  A test is given at the completion of each chapter or unit of study. In addition, a final exam is given at the end of the semester covering all the material taught during the respective semester.
  Since math is cumulative, it is a good idea to keep all tests and quizzes taken in order to use as a study guide for the final exam.
  Missed tests due to excused absences will need to be made up by the student.
  It is the student's responsibility to make time to meet with the teacher to schedule a make-up test. Make up tests need to be completed within 3 days of the day a student returns to school (in most cases).
- projects
  I may assign projects from time to time. The purpose of these projects is to give you a sense of mathematics beyond simply learning how to solve textbook problems. For the most part, these projects will allow you to discover math in the world around you and to use it in "real life" situations. You will be required to present your projects to the class.
- problem-solving write-ups
  About every 2 weeks, you will be involved in a class problem-solving day. You will be responsible for writing about what you've discovered/determined in these activities. More information will be given on these days as they occur.

3. Attitude Towards Learning
   Your attitude towards learning is easily assessed based on your level of participation in discussions and class assignments. It may be that mathematics is not your favorite subject; in which case you will need to demonstrate that you are capable and willing to learn something of less interest to you. It may be that mathematics is your favorite subject; in which case you will want to communicate your love of the subject to others in your discussions, group work, and presentations.

4. Class Discussion
   Often, students will be required to discuss problems in class. During these times, I will be not only assessing your contribution to the discussion but several of the other items you've read that I'll be grading you on. It is required that you participate in discussions.

Tutoring:

I am available for drop-in tutoring on the following dates/times:

Mondays, Wednesdays & Fridays	3:15 p.m. – 3:45 p.m.
Wednesdays	7:15 a.m. – 7:45 a.m.

It is a good idea to check my website (www.imadeit4u.com/cpa) and the Doodle page I created to help schedule tutoring times.