**Inductive Geometry 2019-2020**

**Mrs. Pence – Rm. 2408**

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***Be RESPECTFUL*** ● ***Be RESPONSIBLE*** ● ***Build RELATIONSHIPS***

***You don’t have to be a MATH EXPERT to be an EXPERT MATH LEARNER!!***

Welcome!

**Course Description:** This course takes geometry concepts studied in middle school to a higher level. Topics include angles, lines, planes, and shapes. Students will also study 3-dimensional solids and right triangle trigonometry. There is a strong emphasis on reasoning as students explore and apply geometric properties to real situations. Additionally, written communication as well as mathematical reasoning and problem solving will be incorporated.

**Expectations:** All students are expected to abide by all policies stated in the CNHS Student Handbook; choosing otherwise will result in the consequences detailed in the handbook.

Additionally, students are expected to be **R3** every day:

1. Be **Respectful** – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

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1. Be **Responsible** – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Build **Relationships** – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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***BE A MULTIPLIER OF THE BULLDOG WAY***

**Supplies:**

* pencil & eraser ● scientific calculator (graphing calc. NOT needed)
* 2-pocket folder (provided) \*\**NOTE:* Please see attached letter concerning
* 1-subject notebook (provided) calculators.
* Textbook: *Discovering Geometry*, 5th ed., by Serra

**Grading Policy:** A total-point system will be sued for calculating quarter grades. Grades are made up of three main tasks: *assessments, growth mindset/classwork,* and *Khan Academy assignments.* Assessments, worth 70% of total grade, includes quizzes and tests which may be individual or partner/group assessments. Growth mindset/classwork, worth 20%, includes self-assessment of class effort and participation as well as classwork collected. Khan Academy assignments, worth 10%, will be weekly assignments for extra practice over the concepts covered that week and/or review concepts. Additionally, extra credit may be available at various times throughout year.

Semester grades are made up of final quarter grades plus the final exam score. Each nine weeks grade will be worth 3/7 of the semester grade and the final will be worth the last 1/7.

The following scale will be used to calculate quarter and semester grades:

100-98 A+ 89-87 B+ 79-77 C+ 69-67 D+ 59 and below F

97-93 A 86-83 B 76-73 C 66-63 D

92-90 A- 82-80 B- 72-70 C- 62-60 D-

**Assessments:** *ALL students are required to correct their assessments as an assignments.* Students then may elect to take a different version of the same assessment to earn a higher score. The amount of points possible to earn back will be based on the original assessment score. Retakes must be completed during students’ resource time and turned in by the date of the next assessment. (\*\*If a student does not have a resource, prior arrangements must be made with Mrs. Pence within the given time frame.)

**Khan Academy Assignments:** Khan Academy is an online learning website. Mrs. Pence will assign certain tasks for students to complete each week and will be due the following Monday. Students will earn either 10, 5, or 0 points based on the mastery percentage. Students may continue to work on un-mastered assignments until the end of the quarter in order to earn the full 10 points.

**Make-Up Work:** Students are responsible for talking to classmates and Mrs. Pence to get any make up work from excused absences as well as any and all notes from the lesson. Students have the number of days absent to turn in any makeup work without penalty.

**Cell Phone Policy:** Students are expected to be respectful to their classmates, teacher, and themselves by keeping their phones out of sight and on silent during class time. Continued use during class time will result in consequences including, but not limited to, student loss of cell phone for period/day, phone turned in to dean’s (to be picked up by parent/guardian), detention, phone call and/or conference with parent/guardian, etc.

**Tardy Policy:** Class activities will begin when the bell rings to start class. It is important to be in class on time. The CNHS Handbook policy regarding tardies will be utilized:

1st tardy: Warning 4th tardy: Discipline referral to dean\*

2nd tardy: Teacher conference \*Further consequences outlines in handbook

3rd tardy: Detention

**Help Sessions:** As a class, we will be determining a day/time to set up a course study session with Mrs. Pence. Students who attend these sessions will receive bonus points. Students seeking help can also meet with Mrs. Pence during her 1st period prep time or her 5th period resource time (2nd semester only). Any changes or additional dates/times/locations will be announced in advance.

**Final Thoughts:** This is going to be a great year! If you are **R3** every day and always seeking to **be a multiplier** of the Bull Dog Way, then you will maximize your learning and success in this class! And remember:

***You don’t have to be a MATH EXPERT to be an EXPERT MATH LEARNER!!***

Please sign and return this portion to Mrs. Pence. Please contact Mrs. Pence with any questions.

**STUDENT CONTRACT:** *I have read and understand what is expected of me in Mrs. Pence’s Geometry class. I agree to continually strive to be* ***R3*** *and a* ***MULTIPLIER*** *of the Bull Dog Way. I agree to put forth my best effort every day because I don’t have to be a MATH EXPERT to be an EXPERT MATH LEARNER!!*

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**PARENT/GUARDIAN CONTRACT:** *I have read and understand what is expected of my student in Mrs. Pence’s Geometry class. I agree to continually help my student to be* ***R3*** *and a* ***MULTIPLIER*** *of the Bull Dog Way. I agree to put forth my best effort to ensure my student puts forth theirs.*

Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

August 7, 2019

Dear students and parents,

The entire mathematics curriculum at Columbus North High School incorporates the use of calculator technology. A multitude of studies done over the last twenty years have shown that when calculators are incorporated into lessons teaching mathematical concepts, student learning increases both in terms of conceptual understanding and computational proficiency.

# Algebra 1 and Geometry

Students taking Algebra 1 or Geometry will be required to purchase a scientific calculator. These range in price from $6 to $30. Any scientific calculator will work. To make sure it is scientific, look for trigonometry keys labeled “sin,” “cos,” “tan.” Students in Algebra 1 or Geometry **do not** need a graphing calculator. Some students, however, choose to purchase a graphing calculator instead of a scientific calculator so they can use it for all of their high school math courses. If you plan to purchase a graphing calculator that would replace the scientific calculator, you do not need both. Also, if you plan to purchase a graphing calculator please read the descriptions of acceptable calculators given below.

# Algebra 2, Trigonometry, Precalculus, Finite Math, Statistics, Calculus

Students enrolled in these courses will need a TI83 Plus or a TI84 graphing calculator. Because the calculator is required regularly for homework it is important that each student has his or her own calculator. A TI89 is also permissible for Calculus, although it is significantly more expensive than a TI83+ or TI84 and is more complicated to learn.

**If you purchase a TI calculator this fall, please cut the “Points” label from the package and bring it to your math teacher.** Through the volume purchase program, Texas Instruments will provide Columbus North High School with classroom technology if we collect and send in the Points labels. You will be getting the latest in calculator technology and supporting your school. We all come out winners!

A TI 83 Plus is usually available locally for about $90. The TI84 has a faster processor and more memory than the TI83+. It also costs more. Both calculators function the same. We realize the price can be a hardship on many families. There are other more reasonable options. TI83+ calculators can usually be purchased used for under $50 (including shipping) through eBay. If you take good care of your calculator, it can later be resold for the same price.

**Renting a graphing calculator:** If your current financial situation makes it impossible for you to purchase a calculator, we have a calculator rental program. Forms for calculator rental may be picked up from a math teacher, from the department chair or printed from the North Math website. The cost is $12 per year, payable with cash or check to the Columbus North High School.

**If you would be interested in contributing to a fund to provide loaner calculators for students in need of financial support please let us know.**

Sincerely,

Dale Nowlin

Mathematics Department Chair