Mrs. Trost—Pre-Algebra 5th and 6th periods
Class Syllabus (2017/2018)

INSTRUCTIONAL GOALS

Course Description
The goal is to become proficient or advanced at grade level for the Idaho Core Standards http://www.sde.idaho.gov/site/common/. A secondary, but more important goal, is to gain the knowledge and skill to become successful in your high school algebra class next year. We will be practicing advanced thinking to gain **Algebra readiness**. We will practice on problems that might seem easy so that we can get confidence in our skills for later on when we come across problems that make our brain hurt.

Essential Learning Outcomes:
- Formulate and reason about expressions and equations, including modeling with a linear equation, solving linear equations, and solving systems of linear equations
- Work with radical and integer exponents
- Understand the concept of a function and use functions to describe quantitative relationships
- Analyze two- and three-dimensional space and figures using distance, angle, similarity, and congruence
- Understand and apply the Pythagorean Theorem and it's converse

Learning Targets: At the end of this course, more specific items you will be able to do are...
- Write simple linear equations based off of a graph, with data points, given a table, from a story problem.
- Solve equations with multiple steps, variables on both sides and know if they will l have one, no, or infinitely many solutions.
- Use rational numbers to estimate the value of irrational numbers.
- Apply properties of integer exponents; identify the effect a positive, negative, or zero exponent has on a number.
- Multiply, divide, compare numbers in scientific notation.
- Solve systems of equations graphically and algebraically
- Identify functions in different formats (graph, tables, equations...), including drawing and interpreting scatter plots
- Use the Pythagorean Theorem to find missing sides of a right triangle and the distance between points on a graph.
- Know the formula of and how to solve problems involving volume of cylinders, cones, and spheres
- Rotate, translate, dilate, and reflect images on a coordinate plane; know the effects those have on an image.
- Use the facts of angle relationships to find unknown angles when parallel lines are cut by a transversal

NEEDS AND RESOURCES

Required Background:
To successfully complete this course, you must keep an open mind, work hard and...
- Add, subtract, multiply, and divide whole numbers, integers, and rational numbers in fraction form, mixed number form, and decimal form.
- Order numbers based on knowledge of place value.
- Use order of operations
- Find perimeter of any shape; area of rectangles, squares, triangles, and circles; volume of "boxes"
- Know how to appropriately label a solution.
- Plot points on a coordinate graph.
- Solve equations requiring one, two, and multi-steps using the property of equality and of inverse operations.

Required Materials
- 3-ring binder (1 or 2 inch) for daily notes
- paper: notebook and graph
- ruler
- pencils
- textbook: Big Ideas (provided)
- access to the internet*

   * access in advisory and/or keyboarding class comes in handy as well as home. Websites used:
   www.classzone.com , www.virtualnerd.com, www.youtube.com,
   http://my.hrw.com/math06_07/nsmedia/tools/Graph_Calculator/graphCalc.html (graph calculator),
   www.khanacademy.org, and more when needed...

POLICIES AND PROCEDURES

General Rules:
We will follow the four non-negotiables of Priest River Junior High:
1. Students will be in their seat ready to work when the bell ring or they are considered tardy.
2. The proper heading will be present on all papers in the upper right corner with first and last name, period, assignment name, and date
2. Students must use their agenda to leave class.
3. Students will be Safe, Kind, Respectful, and Responsible.

Specific Policies
1. No cheating: You are encouraged to work with someone else, but do your own, or you're only cheating yourself.
2. Late work is not accepted except for an excused absence. Assignments will be posted on a calendar. It is the **student's** responsibility to copy the assignment from the calendar or to ask for a copy of a worksheet.
3. Homework/Classwork: **All work is to be shown** (see below) and in pencil. Process is heavily assessed!
   * Expect some homework at least 3 days per week.

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                                            Period 4
                                            September 20, 2017
                                            #8 pg. 367  3-42 X 3s

3.  Problem written          6.   Problem written
    - - - - work shown           - - - - work Shown
    - - - - work shown           - - - - work Shown
    Answer w/appropriate units   Answer w/appropriate units


9.   Problem written         12.   Problem written
    - - - - work shown           - - - - work Shown
    - - - - work shown           - - - - work Shown
    Answer w/appropriate units   Answer w/appropriate units
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COURSE SCHEDULE (SUBJECT TO CHANGE)

Semester 1: There will be an end of Semester test covering the highlights of each unit in quarter 1 and quarter 2.

Quarter 1 and 2: Each unit will have 2 quizzes on average, 1 test, and daily assignments.

Unit 1: Solving Equations (chapter 1)   Unit 4: Linear Equations (chapter 4)
Unit 2: Transformations (chapter 2)   Unit 5: Systems of Equations (chapter 5)
Unit 3: Angle Relationships (chapter 3)

Semester 2: There will be an end-of-year final covering highlights of each unit throughout the year and the ISAT test.

Quarter 3 and 4: Same criteria as quarter 1 and 2.

Unit 6: Functions & Data Analysis (chapter 6 & 9)   Unit 8: Roots & Pythagorean Theorem (Chapter 7)
Unit 7: Exponents & Scientific Notation (Chapter 10) Unit 9: Volume Application (chapter 8)

Grading Policies:
1. Assignments: most will be 5 points. They all are based on percentage **completed**--with all work shown.
2. Quizzes will be 20 points and based on the school grading scale. Notebooks can be used on ALL quizzes. I do not allow students to take all hour on a quiz. Each problem is worth a varying amount of points depending on how difficult the problem is. Each step must be shown to get the full amount. Just an answer will not receive full credit.
3. Tests will be 100 points and based on the school grading scale. Students get all class period to take a test, but I do not allow students to come in at lunch or after school to finish a test. Notebooks CANNOT be used on tests.
4. Notebooks are worth around 50 points. There will be one due at the end of each quarter. To get full points, students must have their daily notes, in order, in their 3-ring binder and complete the day they are due.
5. Extra credit is given randomly to every student only at the teacher's discretion.

CONTACT INFORMATION
email: melanietrost@sd83.org (best way to reach me)   phone: 208-448-1118

Please sign and date the paper attached and have your student return it as this is the first assignment of the class.

Sincerely,

Melanie Trost

I have read **Mrs. Trost's** classroom syllabus/procedures for Pre-algebra.

Student name (Print)_____

Student Signature: _____ Date: _____

Parent Signature: _____ Date: _____

Parent E-mail _____

Additional questions _____

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