



Portland Public Schools  
Middle Level  
Syllabus Template

School Year 2011-2012

Teacher: Kate Sullivan		School: Mt. Tabor Middle School	
Subject: Math	Course Title: Algebra 1-2	Grade Level: 9 <sup>th</sup>	
Course description:  The course is structured around problems and investigations that build the conceptual understanding of algebraic topics and an awareness of connections between the different ideas. There are strong threads woven throughout the course on multiple representations and the meaning of a solution. Students will be asked to justify their thinking, generalize relationships, make connections between ideas and reverse thinking to solve problems. A major focus of Algebra 1-2 is to develop multiple strategies to solve problems and to recognize multiple ways of understanding concepts.			
Course outline:  Problem Solving Graphs and Equations Multiplication and Proportions Linear Relationships Inequalities  Variables and Proportions Multiple Representations Systems of Equations Quadratics Simplifying and Solving			
Academic Vocabulary:  Refer to the <u>CPM Algebra Connections</u> text.			
District adopted materials:  <u>College Preparatory Mathematics: Algebra Connections</u>			
Supplemental resources:  <u><a href="http://WWW.cpm.org">http://WWW.cpm.org</a>, Algebra Connections: Parent Guide, Algebra Connections: Extra Practice (Skillbuilders)</u>			

Differentiation/ accessibility strategies and support (TAG, ELL, SpEd):

- Groupwork
  
- Tutoring
- Accessibility strategies #1-10 and 12-15.

Final proficiencies:

Priority standards / Final Proficiencies:

- Solve linear equations with one or two variables.
- Given a situation, identify the variables, write a linear equation and use the equation to solve the problem.
- Given a linear relationship (pattern or situation, graph, table, equation), find the other three representations.
- Given a situation, identify the variables, write a system of linear equations and use the equations to solve the related problem symbolically and graphically.
- Interpret slope as rate.
- Given a system of equations, choose an algebraic strategy (equal values, substitution, or elimination), solve and check the answer.
- Given a point and slope, write a linear equation.
- Given two points, write a linear equation.
- Solve linear inequalities with one variable.
- Solve one and two variable linear inequalities by graphing.
- Find the solution to a given proportion with one variable.
- Given a proportional situation write then solve a proportion.
- Given a quadratic equation, make a table of values and a graph to represent it.
- Solve quadratic equations by factoring and using the quadratic formula.
- Given a quadratic equation, identify the x-intercepts (roots) and y-intercepts without graphing.
- Evaluate variable expressions with integer exponents.

Behavioral expectations:

**ATTENDANCE:** If a student is absent, they will need to check in with the teacher upon the day they return to see what they have missed and what they will need to make up. Students will be given a new due date for work missed due to absence.

**TARDINESS:** One unexcused tardy per quarter is allowed. After that, each tardy is a 30 minute after school detention. A detention form must be signed by a parent or guardian.

*RULES:* Students are expected to come to class prepared, use class time productively and behave in a manner that is both positive and productive.

*CONSEQUENCES:* Warning-name on board

2nd warning- check by name and a 30 minute after school detention

3rd warning- 2 checks by name and a time out and call home. Further consequences may follow.

*CONTACT INFORMATION:* If you need to contact me my email address is ksullivan@pps.net. You can contact me by phone at 503-916-5646 during school hours.