

LineUp With Math™ Alignment
Montana Standards for Mathematics 10/98

Content Standard 1: Students engage in the mathematical processes of problem solving and reasoning, estimation, communication, connections and applications, and using appropriate technology.

Benchmarks: End of Grade 12

Students will:	LineUp With Math™ Activities
1. recognize and formulate problems from situations within and outside mathematics and apply solution strategies to those problems.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.
2. select and apply appropriate estimation strategies throughout the problem-solving process.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations. --Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.
3. formulate definitions, make and justify inferences, express generalizations, and communicate mathematical ideas and relationships.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
4. apply and translate among different representations of the same problem situation or of the same mathematical concept. Model connections between problem situations that arise in disciplines other than mathematics.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts. --Choose and apply a variety of strategies to optimize the solution of air traffic control conflicts.

Content Standard 5: Students demonstrate understanding of measurable attributes and an ability to use measurement processes.

Benchmarks: End of Grade 12

Students will:	LineUp With Math™ Activities
3. investigate systems of derived measures (e.g., km/sec, g/cm ³).	--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.