

***FlyBy Math™* Alignment
Mathematics Standards of Learning**

Computation and Estimation

Standard

8.3 The student will solve practical problems involving rational numbers, percents, ratios, and proportions. Problems will be of varying complexities and will involve real-life data, such as finding a discount and discount prices and balancing a checkbook.

***FlyBy Math™* Activities**

--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

--Compare airspace scenarios for both the same and different starting conditions and the same and different rates.

Probability and Statistics

Standard

8.12 The student will make comparisons, predictions, and inferences, using information displayed in frequency distributions; box-and-whisker plots; scattergrams; line, bar, circle, and picture graphs; and histograms.

***FlyBy Math™* Activities**

--Use tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.

--Use graphs to compare airspace scenarios for both the same and different starting conditions and the same and different constant (fixed) rates.

Patterns, Functions, and Algebra

Standard

8.14 The student will
a) describe and represent relations and functions, using tables, graphs, and rules; and
b) relate and compare tables, graphs, and rules as different forms of representation for relationships.

***FlyBy Math™* Activities**

--Use tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.

--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

8.15 The student will solve two-step equations and inequalities in one variable, using concrete materials, pictorial representations, and paper and pencil.

--Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system.

--Use tables, graphs, and equations to solve aircraft conflict problems.

<p>8.16 The student will graph a linear equation in two variables, in the coordinate plane, using a table of ordered pairs.</p>	<p>--Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system.</p>
<p>8.17 The student will create and solve problems, using proportions, formulas, and functions.</p>	<p>-- Compare airspace scenarios for both the same and different starting conditions and the same and different constant (fixed) rates.</p> <p>--Use the distance-rate-time formula to predict and analyze aircraft conflicts.</p>