Ohio **Grade 7**

FlyBy Math™ Alignment
Academic Content Standards - Mathematics
Grade-Level Indicators

Measurement Standard

Measurement Units

Grade-Level Indicator	*FlyBy Math*™ Activities
1. Select appropriate units for measuring derived measurements; e.g., miles per hour, revolutions per minute.	--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

Use Measurement Techniques and Tools

Grade-Level Indicator	*FlyBy Math*™ Activities
4. Solve problems involving proportional relationships and scale factors; e.g., scale models that require unit conversions within the same measurement system.	--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation. --Use graphs to compare airspace scenarios for both the same and different starting conditions and the same and different constant (fixed) rates.
5. Analyze problem situations involving measurement concepts, select appropriate strategies, and use an organized approach to solve narrative and increasingly complex problems.	--Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

Patterns, Functions and Algebra Standard

Use Patterns, Relations and Functions

Grade-Level Indicator	*FlyBy Math*™ Activities
1. Represent and analyze patterns, rules and functions with words, tables, graphs and simple variable expressions.	--Represent distance, speed, and time relationship for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system. --Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.

Use Algebraic Representation

Grade-Level Indicator	*FlyBy Math*™ Activities
5. Represent linear equations by plotting points in the coordinate plane.	--Represent distance, speed, and time relationship for constant speed cases using linear equations and a Cartesian coordinate system. --Plot points on a schematic of a jet route, on a vertical

	line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.
8. Use formulas in problem-solving situations.	--Use the distance-rate-time formula to predict and analyze aircraft conflicts.
Analyze Change	
Grade-Level Indicator 10. Analyze linear and simple nonlinear relationships to explain how a change in one variable results in the change of another.	***FlyBy Math™* Activities** --Use graphs to compare airspace scenarios for both the same and different starting conditions and the same and different constant (fixed) rates.