

***LineUp With Math™* Alignment**
Arkansas Mathematics Curriculum Framework

Strand: Algebra

Standard 7: Analysis of Change

Students shall analyze change in various contexts

Student Learning Expectation

A.7.5.1
 Model and describe quantities that change using real world situations Ex. age and height

***LineUp With Math™* Activities**

--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

Strand: Measurement

Standard 12: Physical Attributes

Students shall use attributes and tools of measurement to describe and compare mathematical and real-world objects

Student Learning Expectation

M.12.5.1
 Identify and select appropriate units and tools to measure Ex. angles with degrees, distance with feet

***LineUp With Math™* Activities**

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

M.12.5.2
 Make conversions within the customary measurement system in real world problems Ex. hours to minutes, feet to inches, quarts to gallons, etc

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

Standard 13: Systems of Measurement

Students shall identify and use units, systems and processes of measurement

Student Learning Expectation

M.13.5.1
 Solve real world problems involving one *elapsed time*, counting forward (calendar and clock)

***LineUp With Math™* Activities**

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

M.13.5.5
 Count the distance between two points on a horizontal or vertical line and compare the lengths of the paths on a grid Ex. shortest path, paths of equal length, etc

-- Predict and plot the relative motion of two or more airplanes on given paths.
 --Explore and apply a variety of strategies to optimize the solution of air traffic control conflicts.

Strand: Data Analysis and Probability

Standard 16: Inferences and Predictions

Students shall develop and evaluate inferences and predictions that are based on data

Student Learning Expectation

DAP.16.5.1
Make predictions and justify conclusions based on data

***LineUp With Math™* Activities**

--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.