

LineUp With Math™ Alignment
Middle School Mathematics Core Content for Assessment
version 4.0 October 2005

Number Properties and Operations

Estimation

Content Statement

MA-08-1.2.1
Students will estimate to solve real-world and/or mathematical problems with rational numbers checking for reasonable and appropriate computational results.
DOK - 2

LineUp With Math™ Activities

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

Ratios and Proportional Reasoning

Content Statement

MA-08-1.4.1
Students will apply ratios and proportional reasoning to solve real-world problems (e.g., percents, constant rate of change, unit pricing, percent of increase or decrease).
DOK - 3

LineUp With Math™ Activities

--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

 --Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

Measurement

Measuring Physical Attributes

Content Statement

MA-08-2.1.1a
Students will estimate measurements in standard units in real world and/or mathematical situations.

LineUp With Math™ Activities

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

Systems of Measurement

Content Statement

MA-08-2.2.1
Students will provide examples of and apply money, time, and U.S. Customary and metric units of measurement to solve real-world problems.
DOK - 2

LineUp With Math™ Activities

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

Algebraic Thinking

Patterns, Relations, and Functions

Content Statement

MA-08-5.1.3

Students will explain how the change in one variable affects the change in another variable (e.g., if rate remains constant, an increase in time results in an increase in distance).

DOK - 2

***LineUp With Math™* Activities**

--Use an interactive simulator to identify distance, rate, time conflicts in air traffic control problems and resolve the conflicts by varying plane speeds or changing plane routes.