

LineUp With Math™ Alignment
North Dakota Mathematics Content and Achievement Standards
April 2005

Standard 1: Number and Operation

Students understand and use basic and advanced concepts of number and number systems.

NUMBERS, NUMBER RELATIONSHIPS, AND NUMBER SYSTEMS

Benchmark Expectations

8.1.2. Solve real-world problems involving ratio, proportion, and percent.

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.

Standard 4: Measurement

Students use concepts and tools of measurement to describe and quantify the world.

MEASURABLE ATTRIBUTES, MEASUREMENT SYSTEMS AND UNITS

Benchmark Expectations

8.4.1. Select an appropriate degree of precision when using measurements for calculations.

LineUp With Math™ Activities

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

Standard 5: Algebra, Functions and Patterns

Students use algebraic concepts, functions, patterns, and relationships to solve problems.

RATES OF CHANGE

Benchmark Expectations

8.5.6. Solve problems involving rates; i.e., speed equals distance divided by time (miles per hour)

LineUp With Math™ Activities

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

--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.