

ALMOST 6 BILLION AND STILL GROWING (page 663)
Grades 7-12

MATHEMATICS

Standard 1: Students develop number sense and use numbers and number relationships to acquire basic facts, to solve a wide variety of real-world problems, and to determine the reasonableness of results.

Essentials

- 1M-E3. Demonstrate proficiency with the operations of multiplication and division of whole numbers
- 1M-E5. Represent and use numbers in equivalent forms

Proficiency

- 1M-P2. Construct, interpret and demonstrate meaning for real numbers and absolute value in problem-solving situations

Standard 2: Students use data collection and analysis, statistics, and probability to make valid inferences, decisions and arguments and to solve a variety of real-world problems.

Essentials

- 2M-E1. Construct, read, analyze and interpret tables, charts, graphs and data plots
- 2M-E2. Make valid inferences, predictions and arguments based on statistical analysis

Proficiency

- 2M-P1. Construct and draw inferences including measures of central tendency, from charts, tables, graphs and data plots that summarize data from real-world situations
- 2M-P3. Apply curve fitting to make predictions from data
- 2M-P9. Describe, in general terms, the normal curve and use its properties to answer questions about sets of data that are assumed to be normally distributed

Distinction

- 2M-D1. Transform data to aid in data interpretation and prediction
- 2M-D2. Test hypotheses using appropriate statistics
- 2M-D5. Apply curve fitting to determine the strength of the relationship between two data sets and to make predictions from data

Standard 3: Students use algebraic methods to explore, model and describe patterns, relationships and functions involving numbers, shapes, data and graphs within a variety of real-world problem-solving situations.

Essentials

- 3M-E1. Use algebraic methods to explore, model and describe patterns and functions involving numbers, shapes, data, graphs and data plots
- 3M-E4. Analyze functional relationships to explain how a change in one variable results in a change in another
- 3M-E6. Distinguish between linear and nonlinear functions through investigations

SCIENCE

SC07-S1C3-01 THRU 07
SC08-S1C3-01 THRU 18
SCHS-S1C3-01 THRU 04, 06, 07

SC07-S1C4-01 THRU 03, 05
SC08-S1C4-01 THRU 03, 05
SCHS-S1C4-01 THRU 04

SCHS-S3C3-01 THRU 03

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