Topic E

Multi-Step Word Problems

5.NF.2, 5.NF.3, 5.NF.6, 5.NF.7c, 5.MD.1, 5.MD.5, 5.G.2

Instructional Days: 5
Coherence -Links from:
G4–M1 Place Value, Rounding, and Algorithms for Addition and Subtraction
G4–M3 Multi-Digit Multiplication and Division
G4–M5 Fraction Equivalence, Ordering, and Operations
G4–M6 Decimal Fractions
G4–M7 Exploring Measurement with Multiplication

-Links to:
G6–M1 Ratios and Unit Rates
G6–M2 Arithmetic Operations Including Division of Fractions
G6–M5 Area, Surface Area, and Volume Problems

Topic E provides an opportunity for students to encounter complex, multi-step problems requiring the application of the concepts and skills mastered throughout the Grade 5 curriculum. Students use all four operations with both whole and fractional numbers in varied contexts. The problems in Topic E are designed to be non-routine problems that require students to persevere to solve them.

While wrestling with complexity is an important part of Topic E, the true strength of this topic is derived from the time allocated for students to construct arguments and critique the reasoning of their classmates. After students have been given adequate time to ponder and solve the problems, two lessons are devoted to the sharing of approaches and solutions. Students partner to justify their conclusions, communicate them to others, and respond to the arguments of their peers.

A Teaching Sequence Toward Mastery of Multi-Step Word Problems

Objective 1: Make sense of complex, multi-step problems and persevere in solving them. Share and critique peer solutions.
(Lessons 21–25)