MP2c-Use Operations With Whole Numbers To Solve Problems

Content Area: Mathematics

Course(s): Math 4 Resource Room
Time Period: Marking Period 2
Length: MP2 Topic 6 6-1 to 6-5

Status: Published

Essential Questions

- How is comparing with multiplication different from comparing with addition?
- How can you use equations to solve multi-step problems?

Big Ideas

- One-Step Problems: Students solve One-step word problems involving addition, subtraction, multiplication, and division.
- **Multi-Digit Arithmetic:** Students will use place-value understanding and properties of operations to perform multi-digit arithmetic up to 100.

CSDT Technology Integration

8.1.5.A.2 Format a document using a word processing application to enhance text and include graphics, symbols and/ or pictures.

Activity:

Students will create their own one-step word problem. They will type the problem in Google Classroom and choose an image related to the problem. Once completed, students will solve their classmates' problems.

Enduring Understandings

Operations and Algebraic Thinking

4.OA.A.1 [M] Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

4.OA.A.2 [M] Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing

multiplicative comparison from additive comparison.

4.OA.A.3 [M] Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Number and Operations in Base Ten

- 4.NBT.B.5 Multiply a whole number of up to four digits by a one-digit whole number, (and multiply two two-digit numbers), using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
- 4.NBT.B.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Mathematical Practices Focus

1. Make sense of problems and persevere in solving them.