

Addition and subtraction study guide

4.N B.T. 3	Use place value understanding to round multi-digit whole numbers to any place.
4.N B.T. 4	Fluently add and subtract multi-digit whole numbers using the standard algorithm.
4.OA .3	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.

Essential Understanding(s)	Essential Question(s)
<ul style="list-style-type: none"> Students will understand that an algorithm is the formal way mathematicians record the steps taken to solve a problem. 	<ul style="list-style-type: none"> How does the formal algorithm generalize and align to previously learned strategies for addition and subtraction?

- addition/add
- subtraction/subtract
- equations
- unknown
- reasonableness
- mental computation
- estimation
- place value vocabulary from previous unit will be applied throughout this unit as well

Students should be able to explain the connection between different strategies (open number lines, place value drawings, subtotals, making new groups, ungrouping) and the formal algorithm.