

Math365 Chapter 3 Review

Numeration Systems and Whole-Number Computation

Egyptian

Babylonian

Mayan

Roman

Also introduced in the section:

Base five (from Kenya)

Base two (aboriginal tribes): Binary System

Base Twelve: twelve digits; **T** for ten; **E** for eleven

Convert: TEA_{twelve} to base five.

Addition Algorithms

Concrete model

Expanded algorithm

Standard algorithm

Left to Right Algorithm

Lattice Algorithm

Scratch algorithm

Subtraction Algorithms

Concrete model

Equal Addends

Adding and Subtracting in Other Bases

Multiplication

Concrete model

Using distributive property

Lattice Multiplication

Division Algorithms

Base Ten Blocks

Repeated Subtraction

Short Division

Multiplication and Division in Other Bases

Mental Mathematics - Addition

Adding from the left

Breaking up and Bridging

Trading Off

Using compatible numbers

Making compatible numbers

Mental Mathematics - Subtraction

Breaking up and Bridging

Trading Off

Drop the zeros

Mental Mathematics - Multiplication

Front-End

Using compatible numbers

Thinking money

Mental Division

Breaking up the dividend

Using compatible numbers

Estimation

Front end

Grouping to nice numbers

Clustering

Rounding