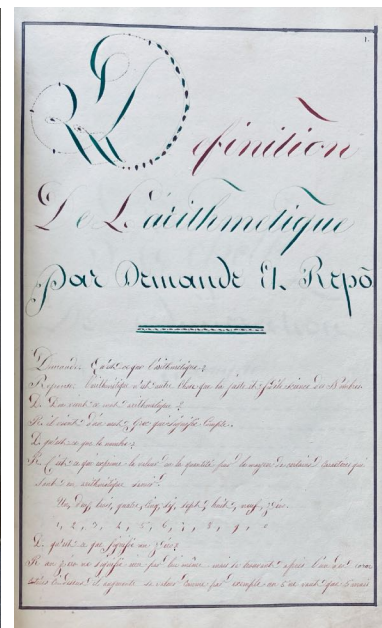
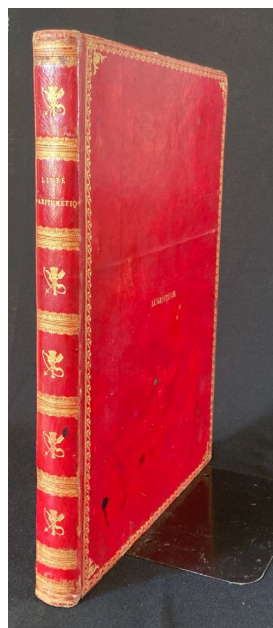


**A Female student's arithmetic primer: bound in luxurious full-red morocco  
60 + exercises, including business and commercial transactions**

**Augustine Garcin. *Livre d'arithmétique*.  
[Aix-en-Provence?, c. 1825].**

Folio: (34 x 22 cm). [5] blank leaves, 88 leaves (text), [4] leaves (table), 16 blank leaves—with text and exercises written on rectos only. Contemporary red morocco with gilt frames on the boards, flat gilt spine, and former owner / student's name "Augustine" on the front cover and "Garcin" on the back cover, all edges gilt. A few scuffs and ink spots to an otherwise lovely binding, internally the volume is excellent. Written on fine Dutch paper with the D&C Blauw watermark, common to late-eighteenth and early-nineteenth century France; all text rectos with black ink borders, and one leaf (7) with ornamental borders. Signed at the end "Augustine G. D'Aix."



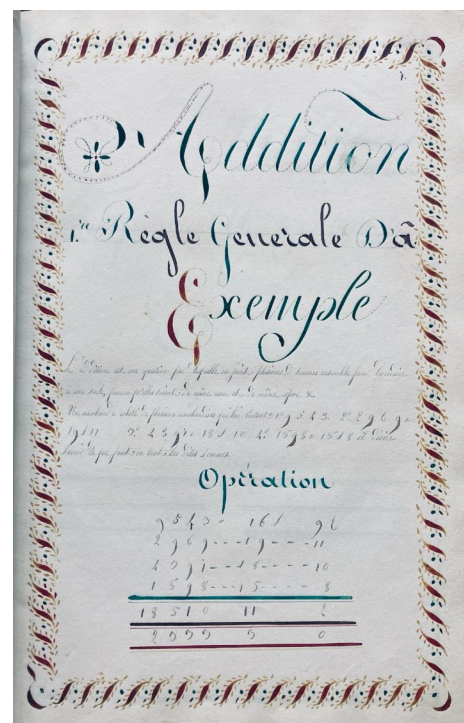
\$3,500

**A female student's large folio arithmetic textbook, written in a neat at times ornamental hand, occasionally in more than one color of ink, formally laid-out and free from doodles, idle pen-trails, or unrelated content. The focus here is on the exceptionally orderly presentation of mathematical exercises for addition, subtraction, multiplication, and division, set in the context of calculating weights & measures for business operations.**

The material aspect of this unusually luxurious textbook—gilt stamped morocco binding and liberal use of paper (the exercises appear on the rectos only), tells us that Augustine must have been from a well-educated and well-to-do family. The carefully hand-written creation of this exercise book also demonstrates her competency in mathematics as well as penmanship. It is further noteworthy that a young woman's education in the early 19th century would include exercises in commercial business as seen here.

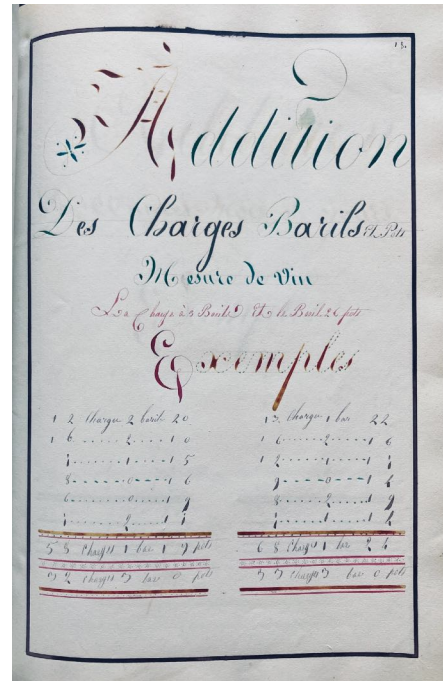
**The work opens with a pedagogical exercise on the principles of arithmetic in a Question and Answer fashion:** the student has responded to a series of 32 questions, beginning with the question: "Qu'est ce que l'arithmétique [*what is arithmetic*]?"

**The table of contents lists over 60 essential exercises in all.**



**Augustine learns standards of weights & measures, and business practices:**

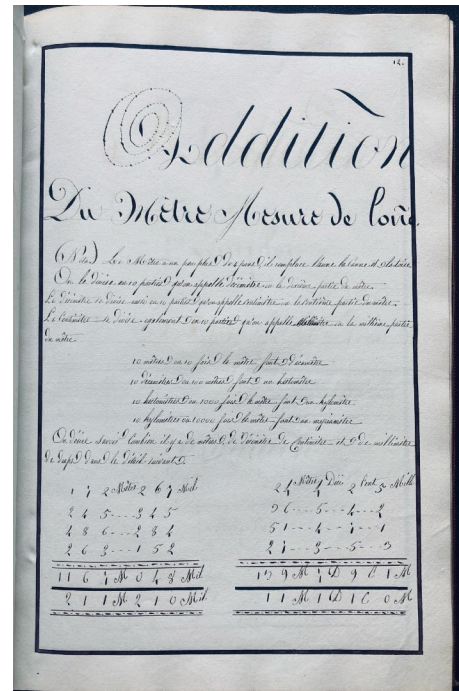
Understanding of basic math, whole numbers and fractions make up most of the exercises, but many of them rely on units of weights & measures that predate the metric system (officially adapted in France in 1799) for the context of the lessons presented, thus providing Augustine with a second topic of learning. In addition to the practicality of learning arithmetic simultaneous to weights & measures, Augustine also learned a number of fundamental business operations, such as how to calculate three-way profit sharing based on unequal initial investment, how to calculate interest accruals, how to convert costs for individual units based on bulk purchases and projecting the desired profit margin based on initial investment. Thus, Augustine’s arithmetic lesson was integrated into a broader and more sophisticated study of commercial business and merchant transactions.



Above: Calculating the cost of wine by the barrel.

Leaf 12 (right), “Addition du metre, Mesure de longueur”, introduces addition for *the meter as a unit of linear measure* that replaces the *aune*, the *canne*, and the *toise*, and describes this new system of measure that comprises meters, decimeters, hectometers, and kilometers, and how to add different values. Similarly, leaf 15 explains the liter, deciliters, hectoliters, and kiloliters; operations for the kilogram appear on leaf 17. Many of the Exercises in this undated textbook include operations using cannes, panes, toises, menus, pieds, puges, aunes, quintales, milliers, sols, deniers, écus, etc., thus dating it to the end of the 18th or perhaps the beginning of the 19th century when such units were either still in use or familiar. There are also exercises for francs and centimes, months, days, and years.

The exercise on leaf 30 (“Subtraction of Time” -- which calculates the age of a person born Jan. 27, 1810 on June 11, 1825) suggests the approximate date of the work as 1825, and, possibly, Augustine’s age as 15.



Toward the end of the text there are a number of word problems, mostly involving business transactions, for calculating averages and more complex equations—leaf 86 (*shown below*), “Règle de compagnie simple [Rule for a simple partnership],” demonstrates how to calculate a three-way profit based on each partner’s initial investment. Other exercises are concerned with projecting costs, calculating unit costs, interest accruals, and other commercial business transactions.



At left: “Règle de compagnie simple”, or the rule for a calculating a simple partnership, leaf 86.

Augustine’s luxurious textbook provides an excellent witness not only for her likely class and background, but also to the education of young woman at the beginning of the 19th century, for basic arithmetic, and also for understanding more complex calculations of non-standard systems of weights & measures, and applying that understanding to commercial transactions.

It is also a fine example of the broader French pedagogical practice of teaching formal graphic expression, the importance given to penmanship, the written word, and the book object.