

Accessible Algorithms for Division

Introduce the accessible algorithms presented below when students learn about multi-digit division. Support students' use of the algorithms whenever they are working on multi-digit division with or without remainders.

Expanded Notation Method

Use with *Houghton Mifflin Math*, Ch 5, Lessons 2, 5.

This algorithm helps students to understand the role of place value in division.

Add the partial quotients. \longrightarrow

43
3
40

3
40

 $\left. \vphantom{\begin{matrix} 3 \\ 40 \end{matrix}} \right\} 43$

67	2,881
	-2,680

	201
	- 201

	0

67	2,881
	-2,680

	201
	- 201

	0

Rectangle Sections Method

Use with *Houghton Mifflin Math*, Ch 5, Lessons 2, 5.

This method of long division can help students find the unknown length of a rectangle when given the rectangle's total area and the length of one side.

First Divide in the greatest place possible.

7	500 3,822 - 3,500 ----- 322
---	---

Multiply. Subtract to find the leftover amount.

Next Build a new section with each leftover amount.

500	+	40	+	6	=	546
-----	---	----	---	---	---	-----

7	3,822 - 3,500 ----- 322	322 - 280 ----- 42	42 - 42 ----- 0
---	----------------------------------	-----------------------------	--------------------------