Parents rail against Common Core math

By Michael Rubinkam, AP

An Iowa woman jokingly calls it "Satan's handiwork." A California mom says she's broken down in tears. A Pennsylvania parent says it "makes my blood boil."

What could be so horrible? Grade-school math.

As schools around the U.S. implement national Common Core learning standards, parents trying to help their kids with math homework say that adding, subtracting, multiplying and dividing has become as complicated as calculus.

They're stumped by unfamiliar terms like "rectangular array" and "area model." They wrestle with division that requires the use of squares, slashes and dots. They rage over impenetrable word problems.

Stacey Jacobson-Francis, 41, of Berkeley, said her daughter's homework requires her to know four different ways to add.

"That is way too much to ask of a first-grader," she said. "She can't remember them all, and I don't know them all, so we just do the best that we can."

Simple arithmetic isn't so simple anymore, leading to plenty of angst at home. Even celebrities aren't immune: The comedian Louis C.K. took to Twitter recently to vent about his kids' convoluted homework, writing that his daughters went from loving math to crying about it.

Adopted by 44 states, the Common Core is a set of English and math standards that spell out what students should know and when. The standards for elementary math emphasize that kids should not only be able to solve arithmetic problems using the

tried-and-true methods their parents learned, but understand how numbers relate to each other.

"Part of what we are trying to teach children is to become problem solvers and thinkers," said Diane Briars, president of the National Council of Teachers of Mathematics. "We want students to understand what they're doing, not just get the right answer."

That's a radically different approach than many parents are accustomed to.

Jennie Barnds, 40, of Davenport, Iowa, was puzzled by her fourth-grade daughter's long division homework, a foreign amalgam of boxes, slashes and dots with nary a quotient or dividend in sight.

"If we are sitting there for 20 minutes trying to do a simple problem, how is an 8-, 9-, 10-year-old supposed to figure it out?" she said. "It's incredibly frustrating for the student and the parent."

Whether Common Core itself is responsible for the homework headaches is a contentious issue.

Some experts say Common Core promotes reform math, a teaching method that gained currency in the 1990s. Derided as "fuzzy" math by critics, reform math says kids should explore and understand concepts like place value before they become fluent in the standard way of doing arithmetic. Critics say it fails to stress basic computational skills, leaving students unprepared for higher math.

Stanford University mathematician James Milgram calls the reform math-inspired standards a "complete mess" — too advanced for younger students, not nearly rigorous enough in the upper grades. And teachers, he contends, are largely ill-prepared to put the standards into practice.

"You are asking teachers to teach something that is incredibly complicated to kids who aren't ready for it," said Milgram, who voted against the standards as part of the committee that reviewed them. "If you don't think craziness will result, then you're being fundamentally naive."

Common Core supporters insist the standards are developmentally appropriate and driven by research.

"For years there has been a raging debate in mathematics education about which is more important, procedural fluency or conceptual understanding. The obvious answer is 'both' and the standards give that answer," said University of Arizona mathematician Bill McCallum, who co-wrote the math standards.

Common Core advocates acknowledge parents are frustrated, but blame the problems on botched implementation, insufficient training or poorly written math programs that predate Common Core.

They say schools also need to communicate better.

"The homework can appear ridiculous when it is taken out of context — that's where the biggest problem lies," said Steve O'Connor, a fifth-grade math teacher in Wells, N.Y. "Parents don't have the context, nor have they been given the means to see the context."

O'Connor has set up a website in an effort to reduce parents' frustration over homework. Other school districts have held workshops for parents to learn alongside their children.

But many parents say they've been on their own, complaining that districts have foisted new math curricula with little explanation.

In Pennsylvania, which signed on to the national Common Core in 2010 but developed its own version, Allison Lienhard said homework sessions with her 10-year-old have ended in tears.

"She gets frustrated because I can't do it the way they are supposed to do it," Lienhard said. "To me, math is numbers, it's concrete, it's black-and-white. I don't understand why you need to bring this conceptual thing into math — at least not at this age."