COLLEGE MILESTONES
COMPLETION OF GATEKEEPER MATH: VIRGINIA

What Is Measured?
Percentage of students who completed a gatekeeper math course within four years of initial enrollment.

Who Is Counted?
First-time students who initially enrolled in a transfer program in the Virginia Community College System (VCCS) in summer or fall 2004 and were enrolled in a developmental math course.

What It Tells Us
Overall, one-fifth (23 percent) of students who were enrolled in a developmental math course completed a gatekeeper math course within four years, while 8 percent did not pass the course and 69 percent did not enroll in a gatekeeper math course. Students referred to developmental math one level below the college level completed a gatekeeper math course at a higher rate than students referred to developmental math three levels below the college level (46 percent vs. 8 percent).

Why It’s Important
There is general consensus that timely completion of gatekeeper courses, the lowest-level college-level courses in the core subjects of mathematics, reading, and writing, positively affects student outcomes such as attainment of certificates and degrees and transfer to a four-year institution (Roksa & Calcagno, 2008, table 4; Horn & Lew, 2007; Offenstein, Moore, & Shulock, 2010, figure 8). Completion of gatekeeper courses fulfills requirements for graduation and transfer as well as prerequisites for more advanced courses in various fields.

ABOUT THE DATA
Gatekeeper math completion: defined as earning a grade C or better.

Gatekeeper math courses: consist of college-level math courses including MTH105, MTH120, MTH121, MTH126, MTH141, MTH151, MTH158, MTH163, MTH166, MTH173, and MTH171.

Developmental math courses: include math one level below the college level (Algebra II or higher: MTH04, MTH05, MTH06, and MTH07); two levels below the college level (Algebra I: MTH03); and three levels below the college level (Pre-Algebra: MTH01, MTH02). First-time college students enrolled in a VCCS college in the summer or fall 2004 terms had no prior college credits other than those earned through high school dual-enrollment programs. Sample includes students in transfer and career tech programs as well as those concurrently enrolled in high school. These students were followed for four years, through the 2008 summer term. Placement recommendations were based on students’ placement test scores, but 36 percent of the students in this group were missing a placement recommendation in math and were excluded from this calculation.

Percentages do not sum to 100 percent due to rounding.

DATA SOURCE
Findings and recommendations from a Virginia study (summary report). New York: Community College Research Center, Teachers College, Columbia University.