



To: State Board of Education
From: Michael Rowland
Cc'ed: Karli Saracini, Joan Luneau, Melissa Jacks
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Re: Assessment for Middle School Mathematics (4-8)
Licensure

Middle School Mathematics (4-8) Assessment

Current Middle School Mathematics (4-8) Licensure Assessment:	Proposed Middle School Mathematics (4-8) Licensure Assessment:
Praxis® Middle School Mathematics (5169)	Praxis® Middle School Mathematics (5164) Recommended Cut Score: 150 (-1 SEM)
	Effective September 1, 2022

Rationale

Middle School Mathematics (4-8) is a first-time licensure area and is also an add-on licensure area. The current Middle School Mathematics (4-8) licensure test is the Praxis® Middle School Mathematics (5169). Educational Testing Service (ETS) has updated the 5169. The new assessment is the Praxis® Middle School Mathematics (5164).

The Praxis® Middle School Mathematics Study Companion document (ETS, in press) describes the purpose and structure of the test. In brief, the test measures knowledge and competencies that are important for safe and effective beginning practice as a middle school mathematics teacher. Approximately 30 percent of the questions call for application of mathematics within a teaching scenario or an instructional task. Such questions—designed to measure applications of mathematics knowledge and skills to the kinds of decisions and evaluations a teacher must make during work with students, curriculum, and instruction—situate mathematics content questions in tasks that are critical for teaching. A full list of the teaching tasks covered, which have been identified based on research on mathematics instructions and are a routine part of mathematics instruction, is provided in the Tasks of Teaching Mathematics section of the Study Companion.

The 180-minute assessment contains 66 selected-response questions covering five content areas: Numbers and Operations (approximately 16 questions), Algebra (approximately 15 questions), Functions (approximately 11 questions), Geometry and Measurement (approximately 13 questions), and Statistics and Probability (approximately 11 questions).

According to the Study Companion, the assessment is designed and developed through work with practicing teachers and teacher educators to reflect the mathematics curriculum as well as state and national standards for mathematics, including the Standards for the Preparation of Middle Level Mathematics Teachers (2020), by the National Council of Teachers of Mathematics (NCTM) and the Council of the Accreditation of Educator Preparation (CAEP).

In February 2021, ETS conducted a virtual multistate standard setting study. As a result, a study value of 157 was determined, and 150 is the score with -1 standard error of measurement (SEM).

For the Middle School Mathematics (4-8) licensure assessment, the Department recommends adopting the Praxis® Middle School Mathematics (5164) with a cut score of 150, effective September 1, 2022.