

SECTION III—RELATIONSHIP OF ASSESSMENT TO STANDARDS

For each NCTM standard on the chart below, identify the assessment(s) in Section II that address the standard. One assessment may apply to multiple NCTM standards.

NCTM STANDARD	APPLICABLE ASSESSMENTS FROM SECTION II
Mathematics Preparation for All Mathematics Teacher Candidates	
1. Knowledge of Problem Solving. Candidates know, understand and apply the process of mathematical problem solving. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
2. Knowledge of Reasoning and Proof. Candidates reason, construct, and evaluate mathematical arguments and develop an appreciation for mathematical rigor and inquiry. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	<input type="checkbox"/> #1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
3. Knowledge of Mathematical Communication. Candidates communicate their mathematical thinking orally and in writing to peers, faculty and others. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	<input type="checkbox"/> #1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
4. Knowledge of Mathematical Connections. Candidates recognize, use, and make connections between and among mathematical ideas and in contexts outside mathematics to build mathematical understanding. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
5. Knowledge of Mathematical Representation. Candidates use varied representations of mathematical ideas to support and deepen students' mathematical understanding. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
6. Knowledge of Technology. Candidates embrace technology as an essential tool for teaching and learning mathematics. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	<input type="checkbox"/> #1 #2 #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
7. Dispositions. Candidates support a positive disposition toward mathematical processes and mathematical learning. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	<input type="checkbox"/> #1 <input type="checkbox"/> #2 #3 #4 #5 #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8

NCTM STANDARD	APPLICABLE ASSESSMENTS FROM SECTION II
8. Knowledge of Mathematics Pedagogy. Candidates possess a deep understanding of how students learn mathematics and of the pedagogical knowledge specific to mathematics teaching and learning [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	<input type="checkbox"/> #1 <input type="checkbox"/> #2 #3 #4 #5 #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
Mathematics Preparation for Secondary Level Mathematics Teacher Candidates	
9. Knowledge of Number and Operations. Candidates demonstrate computational proficiency, including a conceptual understanding of numbers, ways of representing number, relationships among number and number systems, and the meaning of operations. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
10. Knowledge of Different Perspectives on Algebra. Candidates emphasize relationships among quantities including functions, ways of representing mathematical relationships, and the analysis of change. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
11. Knowledge of Geometries. Candidates use spatial visualization and geometric modeling to explore and analyze geometric shapes, structures, and their properties. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
12. Knowledge of Calculus. Candidates demonstrate a conceptual understanding of limit, continuity, differentiation, and integration and a thorough background in techniques and application of the calculus. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
13. Knowledge of Discrete Mathematics. Candidates apply the fundamental ideas of discrete mathematics in the formulation and solution of problems. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
14. Knowledge of Data Analysis, Statistics, and Probability. Candidates demonstrate an understanding of concepts and practices related to data analysis, statistics, and probability. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
15. Knowledge of Measurement. Candidates apply and use measurement concepts and tools. [Indicators are listed at http://www.nctm.org/about/ncate/secondary_indic.htm]	#1 #2 <input type="checkbox"/> #3 <input type="checkbox"/> #4 <input type="checkbox"/> #5 <input type="checkbox"/> #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8
16.1 Field-Based Experiences Engage in a sequence of planned opportunities prior to student teaching that includes observing and participating secondary mathematics classrooms under the supervision of experienced and highly qualified teachers.	Information should be provided in Section I (Context) to address this indicator.

NCTM STANDARD	APPLICABLE ASSESSMENTS FROM SECTION II
16.2 Field-Based Experiences Experience full-time student teaching secondary-level mathematics that is supervised by an experienced and highly qualified teacher and a university or college supervisor with elementary mathematics teaching experience.	Information should be provided in Section I (Context) to address this indicator.
16.3 Field-Based Experiences Demonstrate the ability to increase students' knowledge of mathematics.	<input type="checkbox"/> #1 <input type="checkbox"/> #2 #3 #4 <input type="checkbox"/> #5 #6 <input type="checkbox"/> #7 <input type="checkbox"/> #8

