

North Carolina End-of-Course Math I Test

In October 2013, the State Board of Education (SBE) adopted college-and-career readiness Academic Achievement Standards and Academic Achievement Descriptors for the End-of-Grade (EOG) and End-of-Course (EOC) tests and their alternate assessments. After considering much input on the importance of having more definitive discrimination for student achievement reporting, the SBE adopted at its March 2014 meeting a methodology to add a new achievement level. The addition of the new Achievement Level 3 will identify students who are prepared for the next grade, but do not meet the college-and-career readiness standard. An additional level will also enable more accurate identification of students who need additional instruction and assistance. Effective with the 2013-14 school year, the State will report five levels as follows:

Achievement Level*	Meets On-Grade-Level Proficiency Standard	Meets College-and- Career Readiness Standard
Level 5 denotes Superior Command of knowledge and skills	Yes	Yes
Level 4 denotes Solid Command of knowledge and skills	Yes	Yes
Level 3 denotes Sufficient Command of knowledge and skills	Yes	No
Level 2 denotes Partial Command of knowledge and skills	No	No
Level 1 denotes Limited Command of knowledge and skills	No	No

*Detailed achievement level descriptors are available on the following pages.

Math I Achievement Level Ranges (Cut Scores)

Subject	Level 1	Level 2	Level 3	Level 4	Level 5
Math I (Starting with 2013/14 school year)	≤ 243	244-249	250-252	253-263	≥ 264

Math I Achievement Level Descriptors

Achievement Level 1:

Students performing at this level have a **limited command** of the knowledge and skills contained in the *Common Core State Standards (CCSS)* for Mathematics assessed at the end of Math I and will need academic support to engage successfully in more rigorous studies in this content area. They will also need continued academic support to become prepared to engage successfully in credit-bearing, first-year Mathematics courses without the need for remediation.

Level 1 students are seldom successful when attempting to justify or extend relationships of rational exponents, or develop and use appropriate units, quantities, and scale to solve multi-step problems. These students are rarely able to develop expressions, equations, and inequalities from context or use them to solve multi-step problems. Level 1 students seldom use reasoning to model, interpret, explain, and apply key features of linear, exponential, and quadratic functions. In geometry, they are usually unable to apply and implement precise definitions and formulas to algebraically prove geometric theorems in the coordinate plane. Students rarely demonstrate the ability to summarize, represent, and interpret data for both one variable and two variables or precisely compute and interpret linear models that represent data.

Achievement Level 2:

Students performing at this level have a **partial command** of the knowledge and skills contained in the *Common Core State Standards (CCSS)* for Mathematics assessed at the end of Math I and will likely need academic support to engage successfully in more rigorous studies in this content area. They will also likely need continued academic support to become prepared to engage successfully in credit-bearing, first-year Mathematics courses without the need for remediation.

Level 2 students are sometimes successful when justifying and extending relationships of rational exponents or developing and using appropriate units, quantities, and scale to solve multi-step problems. These students are sometimes able to develop expressions, equations, and inequalities from context and use them to correctly solve multi-step problems. Level 2 students show limited evidence that they are able to use reasoning to model, interpret, explain, and apply key features of linear, exponential, and quadratic functions. In geometry, they can sometimes apply and implement precise definitions and formulas to algebraically prove geometric theorems in the coordinate plane. Students have limited ability to summarize, represent, and interpret data for both one variable and two variables or to precisely compute and interpret linear models that represent data.

Achievement Level 3:

Students performing at this level have a **sufficient command** of knowledge and skills contained in the *Common Core State Standards (CCSS)* for Mathematics assessed at the end of Math I but may need academic support to engage successfully in more rigorous studies in this content area. They are prepared for further studies in this content area but are not yet on track for college-and-career readiness without additional academic support.

Achievement Level 4:

Students performing at this level have **solid command** of the knowledge and skills contained in the *Common Core State Standards (CCSS)* for Mathematics assessed at the end of Math I and are academically prepared to engage successfully in more rigorous studies in this content area. They are also on track to become academically prepared to engage successfully in credit-bearing, first-year Mathematics courses without the need for remediation.

Level 4 students are usually successful when justifying and extending relationships of rational exponents and developing and using appropriate units, quantities, and scale to solve multi-step problems. These students are typically able to develop expressions, equations, and inequalities from context and use them to correctly solve multi-step problems. Level 4 students are usually able to use complex reasoning to model, interpret, explain, and apply key features of linear, exponential, and quadratic functions. In geometry, they can apply and implement precise definitions and formulas to algebraically prove geometric theorems in the coordinate plane. Students are typically able to summarize, represent, and interpret data for both one variable and two variables and precisely compute and interpret linear models that represent data.

Achievement Level 5:

Students performing at this level have a **superior command** of the knowledge and skills contained in the *Common Core State Standards (CCSS)* for Mathematics assessed at the end of Math I and are academically well-prepared to engage successfully in more rigorous studies in this content area. They are also on-track to become academically prepared to engage successfully in credit-bearing, first-year Mathematics courses without the need for remediation.

Level 5 students have a high level of success when justifying and extending relationships of rational exponents and developing and using appropriate units, quantities, and scale to solve multi-step problems. These students have a strong ability to develop expressions, equations, and inequalities from context and use them to correctly solve multi-step problems. Level 5 students consistently use complex reasoning to model, interpret, explain, and apply key features of linear, exponential, and quadratic functions. In geometry, they have a high level of success when applying and implementing precise definitions and formulas to algebraically prove geometric theorems in the coordinate plane. Students are consistently able to summarize, represent, and interpret data for both one variable and two variables and precisely compute and interpret linear models that represent data.