# Achievement Level Descriptors

# for

# Coordinate Algebra

*Based on the 2014-2015 Administrations*

## Achievement Levels and Achievement Level Descriptors

With the implementation of the Georgia Milestones Assessment System, Georgia educators have developed four achievement levels to describe student mastery and command of the knowledge and skills outlined in Georgia's content standards. Most students have at least some knowledge of the content described in the content standards; however, achievement levels succinctly describe how much mastery a student has. Achievement levels give meaning and context to scale scores by describing the knowledge and skills students must demonstrate to achieve each level.

The four achievement levels on Georgia Milestones are *Beginning Learner, Developing Learner, Proficient Learner,* and *Distinguished Learner.* The general meaning of each of the four levels is provided below:

**Beginning Learners** **do not yet demonstrate proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students **need substantial academic support** to be prepared for the next grade level or course and to be on track for college and career readiness*.*

**Developing Learners** **demonstrate partial proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students **need additional academic support** to ensure success in the next grade level or course and to be on track for college and career readiness*.*

**Proficient Learners** **demonstrate proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students **are prepared** for the next grade level or course and are on track for college and career readiness*.*

**Distinguished Learners** **demonstrate advanced proficiency** in the knowledge and skills necessary at this grade level/course of learning, as specified in Georgia's content standards. The students **are well prepared** for the next grade level or course and are well prepared for college and career readiness*.*

More detailed and content-specific concepts and skills are provided for each grade, content area, and course in the **Achievement Level Descriptors** (ALDs). ALDs are narrative descriptions of the knowledge and skills expected at each of the four achievement levels and were developed for each grade level, content area, and course by committees of Georgia educators in March 2015 and July 2015. The ALDs are based on the state-adopted content standards.

**ALDs show a *progression of knowledge and skills*** for which students must demonstrate competency across the achievement levels. It is important to understand that a student should demonstrate mastery of the knowledge and skills within his/her achievement level *as well as all content and skills in any achievement levels that precede his/her own, if any*. For example, a Proficient Learner should also possess the knowledge and skills of a Developing Learner *and* a Beginning Learner.

| ALD | Standard | Beginning Learner | Developing Learner | Proficient Learner | Distinguished Learner |
|---|---|---|---|---|---|
| Policy | | **Beginning Learners do not yet demonstrate proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in Georgia's content standards. The students need substantial academic support to be prepared for the next grade level or course and to be on track for *college and career readiness.* | **Developing Learners demonstrate partial proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in Georgia's content standards. The students need additional academic support to ensure success in the next grade level or course and to be on track for *college and career readiness.* | **Proficient Learners demonstrate proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in Georgia's content standards. The students are prepared for the next grade level or course and are on track for *college and career readiness.* | **Distinguished Learners demonstrate advanced proficiency in the knowledge and skills** necessary at this grade level/course of learning, as specified in Georgia's content standards. The students are well prepared for the next grade level or course and are well prepared for *college and career readiness.* |
| | | | | | |
| Range | | A student who achieves at the **Beginning Learner** level demonstrates minimal command of the grade-level standards. | A student who achieves at the **Developing Learner** level demonstrates partial command of the grade-level standards. | A student who achieves at the **Proficient Learner** level demonstrates proficiency of the grade-level standards. | A student who achieves at the **Distinguished Learner** level demonstrates advanced proficiency of the grade-level standards. |
| | | | | | |
| | N.Q.1 N.Q.2 N.Q.3 | Uses numbers and units to solve problems. | Reasons with numbers and units to solve problems. | Reasons quantitatively and uses units to solve problems. | Reasons analytically and quantitatively and interprets, represents, and uses units to solve problems. |
| | A.SSE.1 A.CED.1 A.CED.2 A.CED.3 A.CED.4 A.REI.1 A.REI.3 A.REI.5 A.REI.6 A.REI.10 A.REI.11 A.REI.12 | Identifies equations that describe numbers and solves equations in one variable. | Understands the structure of expressions, identifies equations that describe numbers or relationships, understands solving equations as a process of reasoning, and solves and graphs systems of equations. | Interprets the structure of expressions, creates equations that describe numbers or relationships, understands solving equations as a process of reasoning and explains the reasoning, and solves and graphs equations and inequalities with one or two variables and systems of equations with two variables. | Interprets and analyzes the structure of expressions; creates and represents equations that describe numbers and relationships; understands solving equations as a process of reasoning and explains the reasoning; and solves and graphs multistep equations and inequalities with one or two variables and systems of equations with two variables, in context. |

| | | | | | |
|---|---|---|---|---|---|
| | F.IF.1<br>F.IF.2<br>F.IF.3<br>F.IF.4<br>F.IF.5<br>F.IF.6<br>F.IF.7<br>F.IF.9 | Identifies and defines a function. | Understands the concept of a function and uses function notation. | Interprets functions by understanding the concept of a function and uses function notation, interprets functions that arise in applications in terms of the context, and analyzes functions using different representations. | Interprets and analyzes functions by understanding the concept of a function, recognizes and uses contextual forms of function notation, interprets functions that arise in applications in terms of contexts, and analyzes functions using multiple representations. |
| | F.BF.1<br>F.BF.2<br>F.BF.3 | N/A | Builds functions from models of a relationship between two sets of data. | Builds functions that model a relationship between two quantities and builds functions from existing functions. | Builds functions that model a relationship between two quantities or contexts and builds and tests functions from existing functions. |
| | F.LE.1<br>F.LE.2<br>F.LE.3<br>F.LE.5 | N/A | Compares linear and exponential models. | Constructs and compares linear and exponential models and solves problems and interprets expressions for functions in terms of the situation they model. | Constructs, compares, and analyzes linear and exponential models and solves complex problems and represents, interprets, and translates expressions for functions in terms of the situation they model. |
| | G.CO.1<br>G.CO.2<br>G.CO.3<br>G.CO.4<br>G.CO.5<br>G.GPE.4<br>G.GPE.5<br>G.GPE.6<br>G.GPE.7 | Understands angles, circles, perpendicular lines, parallel lines, and line segments. | Understands and represents transformations in the plane. | Experiments with transformations in the plane and uses coordinates to prove simple geometric theorems algebraically. | Understands, interprets, uses, and experiments with transformations in the plane to demonstrate knowledge of and analyze congruence in terms of transformations and uses coordinates to prove geometric theorems algebraically. |
| | S.ID.1<br>S.ID.2<br>S.ID.3<br>S.ID.5<br>S.ID.6<br>S.ID.7 | Represents data on a single count or measurement variable. | Represents and interprets data on a single count or measurement variable. | Summarizes, represents, and interprets data on a single count or measurement variable; summarizes, represents, and interprets data on two categorical and | Summarizes, represents, and interprets data on single count and measurement variables; summarizes, represents, and interprets data on two categorical and quantitative |

| | | | | quantitative variables; and interprets linear models. | variables; and interprets and analyzes linear models. |
|---|---|---|---|---|---|
| | S.ID.8 S.ID.9 | | | | |