ASSESSMENT CONTENT BRIEF

CLT, CLT10 & CLT8

CLT

Classic Learning Test

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Overview of the CLT Assessment Suite

Verbal Reasoning

Comprehension

Passage as a Whole: Questions on passage as a whole test the student's ability to synthesize information from the entire passage to understand its framework and main ideas.

Passage Details: Questions on passage details test the student's ability to understand key facts and concepts discussed in a passage.

Passage Relationships: Questions on passage relationships test the student's ability to recognize important connections between different parts of the passage.

Analysis

Textual Analysis: Questions on textual analysis test the student's ability to make inferences from information in the passage and understand a character, narrator, or writer's point of view.

Interpretation of Evidence: Questions on interpretation of evidence test the student's ability to understand how verbal and quantitative evidence are used in a passage.

Overview of the CLT Assessment Suite

cont.

Grammar/Writing

Grammar

Agreement: Questions on agreement test the student's ability to recognize how individual elements of a sentence correspond or agree with one another.

Punctuation and Sentence Structure: Questions on punctuation and sentence structure test the student's ability to understand how different elements of a sentence are linked together through punctuation and how to properly construct a sentence.

Writing

Structure: Questions on structure test the student's ability to recognize how different parts of a passage, paragraph, and sentence relate to one another.

Style: Questions on style test the student's ability to understand a writer's tone and intent.

Word Choice: Questions on word choice test the student's ability to recognize how different words fit into different contexts.

Overview of the CLT Assessment Suite

cont.

Quantitative Reasoning

Pre-Algebra and Algebra (CLT8)/Algebra (CLT10/CLT)

Arithmetic and Operations: Questions on arithmetic and operations test the student's ability to use basic rules of arithmetic to simplify and draw conclusions about expressions, as well as their ability to recognize patterns.

Algebraic Expressions and Equations: Questions on algebraic expressions and equations test the student's ability to simplify algebraic expressions, solve equations and inequalities, and substitute variables into algebraic expressions.

Geometrical Reasoning (CLT8)/Geometry (CLT10/CLT)

Plane Geometry: Questions on plane geometry test the student's ability to analyze two-dimensional shapes and to understand points, lines, figures, and functions in the coordinate plane.

Properties of Shapes: Questions on properties of shapes test the student's ability to analyze circles, triangles, and other polygons and determine additional information about those shapes.

Trigonometry (CLT only): Questions on trigonometry test the student's ability to use a right triangle's angle measurements and the ratios between its side lengths in order to deduce additional information. Advanced questions also look at students' ability to understand and manipulate trigonometric identities and the graphing of trigonometric functions.

Mathematical Reasoning (CLT8/CLT10/CLT)

Logic: Questions on logic test the student's ability to use given information to arrive at a new conclusion.

Word Problems: Word problems test the student's ability to use reasoning and logic to draw conclusions about real-life scenarios.

"And what, Socrates, is the food of the soul? Surely, I said, knowledge is the food of the soul."

Plato

Detailed Description of the Verbal Reasoning Section

The Verbal Reasoning Section

The material in the Verbal Reasoning Section is drawn from passages in the Western intellectual tradition (see the Author Bank). These passages fall into four categories that are consistent across each exam:

- Philosophy/Religion
- Science
- Literature
- Historical/American Founding Documents

Each passage has ten questions. They are not ordered by level of difficulty. These questions test students' ability to understand and draw conclusions about topics, including:

- The passage's main ideas
- The author's tone or attitude
- A character's motives
- The meaning of a word or phrase in context
- The structure of a passage
- The evidence or support for the answer to a previous question
- Passage-based analogies

VERBAL REASONING SECTION	
Passage Type:	**Description:**
Literature	The passages in the Literature category are drawn from classic and modern literary prose. Authors include those whose stories, style, and ideas have contributed significantly to Western culture.
Science (with Graphic)	The passages in the Science category are from articles, essays, and other works exploring various disciplines such as genetics, astronomy, physics, biology, and chemistry. When relevant, these passages may touch on the ethical, moral, or societal implications of the given work. Each science passage in the Verbal Reasoning section will be accompanied by a graphic, such as a chart or table.
Philosophy/Religion	The passages in the Philosophy/Religion category are from contemporary or classic sources, and are concerned with issues of truth, reasoning, ethics, and more. They are drawn from a variety of perspectives and time periods.
Historical/American Founding Documents (Dual Passages)	The paired passages in the Historical/Founding Documents category are two brief selections that present perspectives on an important topic. The first is a historical document drawn from ancient sources. The second is a passage from a writer or time period essential to U.S. history.

Detailed Description of the Grammar/Writing Section

The Grammar/Writing Section

The material in the Grammar/Writing Section is drawn from essential sources in the Western intellectual tradition. They fall into four categories that remain consistent across each exam:

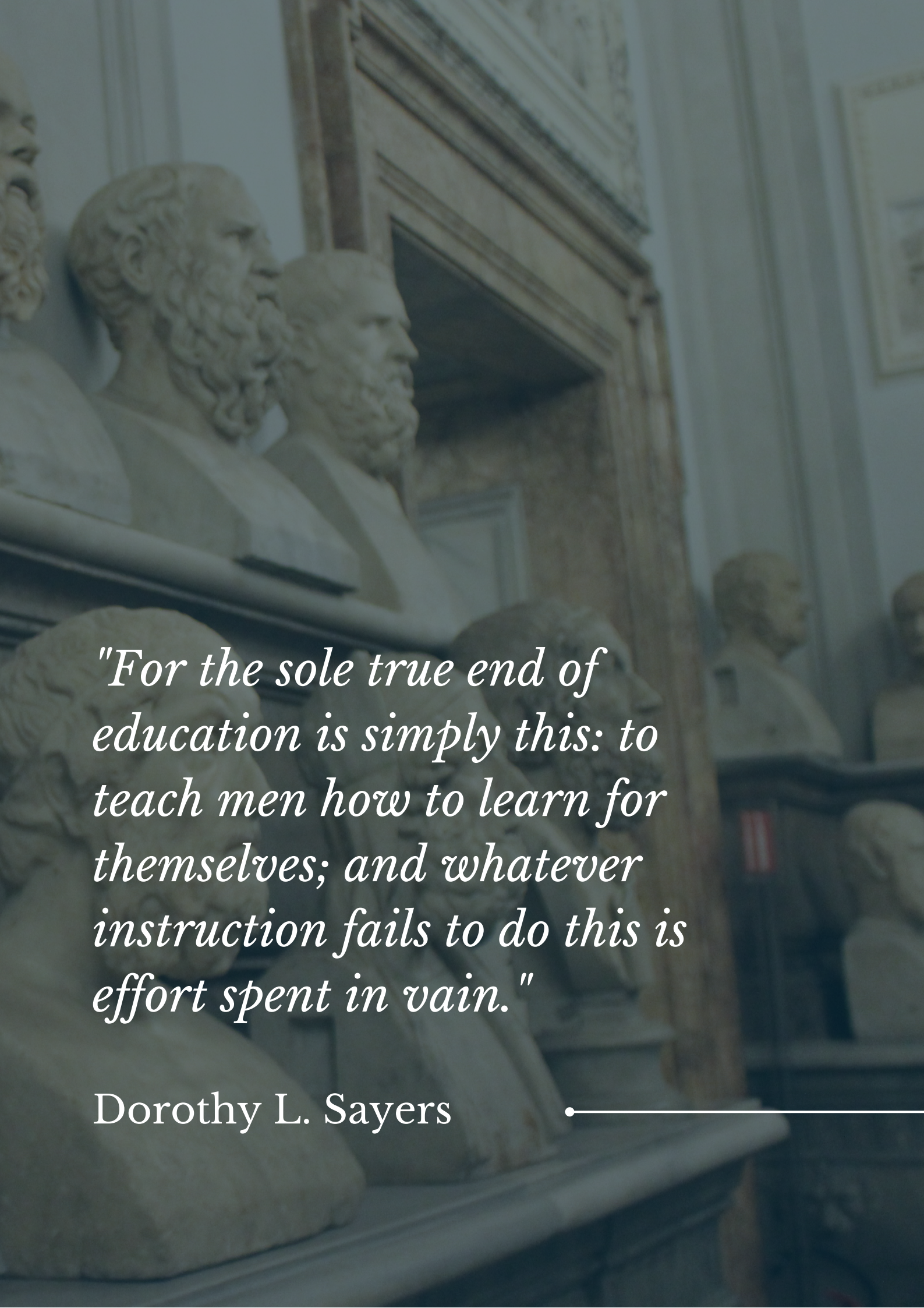
- Philosophy/Religion
- Science
- Historical Profile
- Modern Influential Thinkers/Issues

Each passage has ten questions, which are not ordered by level of difficulty. Each question requires students to either correct an error or suggest an improvement in the passage. If no change is necessary, students can select the option “NO CHANGE.”

Questions may test students’ ability to understand, correct, or improve on:

- Diction (word choice)
- Punctuation
- Syntax (sentence structure)
- Flow
- Logical coherence
- Subject-verb agreement
- Rhetorical strength of additional/subtracted sentences
- Pronoun-antecedent agreement

GRAMMAR/WRITING SECTION	
Passage Type:	**Description:**
Philosophy/Religion	The passages in the Philosophy/Religion category are contemporary or classic sources that touch on issues of truth, reasoning, ethics, and more. They are drawn from a variety of perspectives and time periods.
Historical Profile	The passages in the Historical Profile category consist of short biographical pieces on important historical figures, such as Joan of Arc or Shakespeare.
Science	The passages in the Science category are from articles, essays, and other works exploring various disciplines such as genetics, astronomy, physics, biology, and chemistry. When relevant, these passages may touch on the ethical, moral, or societal implications of the given work.
Modern Influential Thinkers/Issues	The passages in the Modern Influential Thinkers/Issues category are similar in scope to the Philosophy/Religion category, but are always drawn from more modern sources and may offer perspectives on salient issues faced by modern society.



"For the sole true end of education is simply this: to teach men how to learn for themselves; and whatever instruction fails to do this is effort spent in vain."

Dorothy L. Sayers

Detailed Quantitative Reasoning Skills Assessed with Corresponding Mathematical Subjects

CLT Skills by Domain

The CLT Quantitative Reasoning section focuses on three domains: Algebra, Geometry, and Mathematical Reasoning. The Algebra domain focuses on material covered in standard Algebra I and II courses. The Geometry domain includes material from Geometry and Trigonometry courses. The Mathematical Reasoning domain covers both Algebra- and Geometry-related questions requiring logic and critical thinking skills to solve problems.

ALGEBRA	
Arithmetic & Operations – *Questions test the student's ability to use properties of numbers and basic rules of arithmetic to simplify expressions, recognize patterns, and solve equations.*	
Skill:	**Class Correlation:**
• Solve absolute value equations & inequalities	Algebra II
• Simplify absolute value expressions • Use properties of exponents to simplify expressions • Recognize patterns and identify terms in a sequence	Algebra I
• Calculate and interpret probablity of an event • Draw conclusions by applying properties of prime numbers, even & odd integers, and negative & positive integers	Pre-Algebra

Algebraic Expressions & Equations – *Questions test the student's ability to simplify expressions, solve equations & inequalities, and substitute variables or values into expressions.*	
Skill:	**Class Correlation:**
• Solve compound inequalities	Algebra II
• Factor and solve quadratic equations with real and complex roots • Solve systems of equations and inequalities in two or three variables • Substitute values using special symbols	Algebra I & Algebra II
• Substitute terms or values into expressions and simplify them • Solve equations & inequalities	Algebra I

GEOMETRY	
Plane Geometry – *Questions test the student's ability to analyze two-dimensional figures and points, lines, and functions on the (x,y) coordinate plane.*	
Skill:	**Class Correlation:**
• Find missing angle measurements & segment lengths in 2-D figures • Transform points, lines, and figures in the *(x,y)*-coordinate plane, including reflection over the line $y = x$	Geometry
• Find the slope of a line, given an equation or two points on the line • Find the x and y intercepts of a line • Identify the slope of parallel and perpendicular lines • Identify and apply the slope of vertical & horizontal lines	Geometry & Algebra I

Properties of Shapes – *Questions test the student's ability to analyze triangles, polygons, circles, cylinders, spheres, and prisms, and determine additional information about those shapes. Basic formulas are given.*	
Skill:	**Class Correlation:**
• Determine and apply triangle congruence • Use properties of similar shapes to find missing angle measures, side lengths, perimeters, areas, etc. • Find and apply the area & circumference of a circle	Geometry

Trigonometry – *Questions test the student's ability to use a right triangle's angle measurements and the ratio between its side lengths to deduce additional information. Advanced questions include manipulating trigonometric identities and analyzing graphs of trig functions. Basic trigonometric functions and identities are given.*	
Skill:	**Class Correlation:**
• Identify a trigonometric ratio for a given angle in a right triangle	Geometry
• Use trigonometric identities to simplify an expression • Recognize identical trigonometric expressions • Identify and interpret graphs of trigonometric equations • Convert between degrees and radians • Analyze an angle given on the unit circle • Identify trigonometric functions of angles on the unit circle	Algebra II and Trigonometry

MATHEMATICAL REASONING

Logic – *Questions test the student's ability to use given information to arrive at a new conclusion. Content may be drawn from a variety of mathematical disciplines.*

Skill:	Class Correlation:
• Analyze a set of numbers based on a pair of conditions • Identify counterexamples of a given statement • Identify true & false statements based on given information • Draw conclusions about an unknown integer from given information	Algebra, Geometry, and Algebra II

Word Problems – *Questions test the student's ability to use reasoning and logic to draw conclusions about real life scenarios. Content may be drawn from a variety of mathematical disciplines.*

Skill:	Class Correlation:
• Draw logical conclusions given real-life conditions • Identify the truth value of statements under given. conditions • Apply spatial reasoning about geometric figures in real-life scenarios	Algebra, Geometry, and Algebra II
• Solve real-life problems of percentof increase & decrease • Solve real-life problems of proportion, ration, and rate • Analyze a quadratic function modeling a real-life scenario • Solve real-life work-rate word problems	Algebra, Geometry, and Algebra II

CLT10 Skills by Domain

Similar to the CLT Quantitative Reasoning section, the CLT10 assesses students up to the Algebra II level. However, it does not contain trigonometry questions, but instead puts more emphasis on an understanding of properties of triangles.

ALGEBRA	
Arithmetic & Operations – *Questions test the student's ability to use properties of numbers and basic rules of arithmetic to simplify expressions, recognize patterns, and solve equations.*	
Skill:	**Class Correlation:**
• Solve absolute value equations & inequalities	Algebra II
• Simplify absolute value expressions • Use properties of exponents to simplify expressions • Recognize patterns and identify terms in a sequence	Algebra I
• Calculate and interpret probablity of an event • Draw conclusions by applying properties of prime numbers, even & odd integers, and negative & positive integers.	Pre-Algebra

Algebraic Expressions & Equations – *Questions test the student's ability to simplify expressions, solve equations & inequalities, and substitute variables or values into expressions.*	
Skill:	**Class Correlation:**
• Solve compound inequalities	Algebra II
• Factor and solve quadratic equations with real and complex roots • Solve systems of equations and inequalities in two or three variables • Substitute values using special symbols	Algebra I & Algebra II
• Substitute terms or values into expressions and simplify them • Solve equations & inequalities	Algebra I

GEOMETRY

Plane Geometry – *Questions test the student's ability to analyze two-dimensional figures and points, lines, and functions on the (x,y) coordinate plane.*

Skill:	Class Correlation:
• Find missing angle measures & segment lengths in 2-D figures • Transform points, lines, and figures in the *(x,y)*-coordinate plane, including reflection over the line $y = x$.	Geometry
• Find the slope of a line, given an equation or two points on the line • Find the x and y intercepts of a line • Identify the slope of parallel and perpendicular lines • Identify and apply the slope of vertical & horizontal lines	Geometry & Algebgra I

Properties of Shapes – *Questions test the student's ability to analyze triangles, polygons, circles, cylinders, spheres, and prisms, and determine additional information about those shapes. Basic formulas are given.*

Skill:	Class Correlation:
• Determine and apply triangle congruence • Use properties of similar shapes to find missing angle measurements, side lengths, perimeters, areas, etc. • Find and apply the area & circumference of a circle • Use the Pythagorean Theorem to find missing side lengths, perimeters, areas, etc. • Use the ratio of side lengths in special right triangles to find missing side lengths, perimeters, areas, etc. • Apply properties of isosceles, right, and equilateral triangles • Find the area, perimeter, or another value given the area or perimeter of two-dimensional figures • Find the surface area, volume, or another value given surface area or volume of three-dimensional figures	Geometry

MATHEMATICAL REASONING

Logic – *Questions test the student's ability to use given information to arrive at a new conclusion. Content may be drawn from a variety of mathematical disciplines.*

Skill:	Class Correlation:
• Analyze a set of numbers based on a pair of conditions • Identify counterexamples of a given statement • Identify true & false statements based on given information • Draw conclusions about an unknown integer from given information	Algebra, Geometry, and Algebra II

Word Problems – *Questions test the student's ability to use reasoning and logic to draw conclusions about real life scenarios. Content may be drawn from a variety of mathematical disciplines.*

Skill:	Class Correlation:
• Draw logical conclusions given real-life conditions • Identify the truth value of statements under given conditions • Apply spatial reasoning about geometric figures in real-life scenarios • Solve percent of increase & decrease real-life problems • Solve proportion, ratio, and rate real-life problems • Analyze a quadratic function modeling a real-life scenario • Solve real-life problems of proportion, ratio, and rate	Algebra, Geometry, and Algebra II

CLT8 Skills by Domain

With some general similarities to both the CLT and the CLT10, the CLT8 assesses students up to the Algebra I level. It does not contain trigonometry and instead puts more emphasis on basic triangle understanding. Questions in the Algebra domain are less complex and place more emphasis on linear rather than quadratic functions. Mathematical Reasoning questions draw from algebra and geometry concepts at a level appropriate for an Algebra I student.

PRE-ALGEBRA AND ALGEBRA	
Arithmetic & Operations – *Questions test the student's ability to use properties of numbers and basic rules of arithmetic to simplify expressions, recognize patterns, and solve equations.*	
Skill:	**Class Correlation:**
• Use properties of exponents to simplify expressions • Recognize patterns and identify terms in a sequence	Algebra I
• Simplify an expression using order of operations • Calculate and interpret probability of an event • Draw conclusions by applying properties of prime numbers, even & odd integers, and negative & positive integers	Pre-Algebra

Algebraic Expressions & Equations – *Questions test the student's ability to simplify expressions, solve equations & inequalities, and substitute variables or values into expressions.*	
Skill:	**Class Correlation:**
• Substitute terms or values into expressions and simplify them • Solve one, two, and multi-step equations • Solve systems of equations • Solve quadratic equations with real roots • Substitute values using special symbols	Algebra I

GEOMETRY

Plane Geometry – *Questions test the student's ability to analyze two-dimensional figures and points, lines, and functions on the (x,y) coordinate plane.*

Skill:	Class Correlation:
• Find the slope of a line, given an equation or two points on the line • Identify the slope of parallel and perpendicular lines • Identify and apply the slope of vertical & horizontal lines • Translate and reflect points, lines, & figures in the *(y-x)*-coordinate plane	Algebra I
• Identify the location of quadrants, axes, and ordered pairs • Find the x and y intercepts of a line	Pre-Algebra

Properties of Shapes – *Questions test the student's ability to analyze triangles, polygons, circles, cylinders, spheres, and prisms, and determine additional information about those shapes. Basic formulas are given.*

Skill:	Class Correlation:
• Use properties of similar shapes to find missing angle measures, side lengths, perimeters, areas, etc. • Find and apply the area & circumference of a circle • Find missing angle measurements of triangles and parallel lines cut by a transversal • Find the area and perimeter of a triangle • Draw conclusions using properties of right, isosceles, and equilateral triangles • Analyze the relationship between angle measurements and leg length in a triangle • Find the area, perimeter, or another value given the area or perimeter of two-dimensional figures • Find the surface area, volume, or another value given surface area or volume of three-dimensional figures	Pre-Algebra

MATHEMATICAL REASONING

Logic – *Questions test the student's ability to use given information to arrive at a new conclusion. Content may be drawn from a variety of mathematical disciplines.*

Skill:	Class Correlation:
• Analyze a set of numbers based on a pair of conditions • Identify counterexamples of a given statement • Identify true & false statements based on given information • Draw conclusions about an unknown integer from given information	Pre-Algebra and Algebra

Word Problems – *Questions test the student's ability to use reasoning and logic to draw conclusions about real-life scenarios.*

Skill:	Class Correlation:
• Draw logical conclusions given real-life conditions • Identify the truth value of statements under given conditions • Apply spatial reasoning about geometric figures in real-life scenarios • Solve real-life problems of percent of increase and decrease • Solve real-life problems of proportion, ratio, and rate	Pre-Algebra & Algebra


"Dwell on the beauty of life.
Watch the stars, and see
yourself running with them."
Marcus Aurelius