

20% Financial Mathematics
 Percents, percent change, markups, discounts, taxes, profit, and loss
 Interest: simple, compound, continuous interest, effective interest rate, effective annual yield or annual percentage rate (APR)
 Present value and future value
 Applications

10% Geometry
 Properties of triangles and quadrilaterals: perimeter, area, similarity, and the Pythagorean theorem
 Parallel and perpendicular lines
 Properties of circles: circumference, area, central angles, inscribed angles, and sectors
 Applications

15% Logic and Sets
 Logical operations and statements: conditional statements, conjunctions, disjunctions, negations, hypotheses, logical conclusions, converses, inverses, counterexamples, contrapositives, logical equivalence
 Set relationships, subsets, disjoint sets, equality of sets, and Venn diagrams
 Operations on sets: union, intersection, complement, and Cartesian product
 Applications

10% Numbers
 Properties of numbers and their operations: integers and rational, irrational, and real numbers (including recognizing rational and irrational numbers)
 Elementary number theory: factors and divisibility, primes and composites, odd and even integers, and the fundamental theorem of arithmetic
 Measurement: unit conversion, scientific notation, and numerical precision
 Absolute value
 Applications

Sample Test Questions

The following sample questions do not appear on an actual CLEP examination. They are intended to give potential test-takers an indication of the format and difficulty level of the examination and to provide content for practice and review. Knowing the correct answers to all of the sample questions is not a guarantee of satisfactory performance on the exam.

Directions: An online scientific calculator will be available for the questions in this test.

Some questions will require you to select from among four choices. For these questions, select the BEST of the choices given.

Some questions will require you to type a numerical answer in the box provided.

Some questions refer to a table in which statements appear in the first column. For each statement, select the correct properties by check-marking the appropriate cell(s) in the table.

Notes: (1) Unless otherwise specified, the domain of any function f is assumed to be the set of all real numbers x for which $f(x)$ is a real number.

(2) Figures that accompany questions are intended to provide information useful in answering the questions. The figures are drawn as accurately as possible EXCEPT when it is stated in a specific question that the figure is not drawn to scale.

(3) If a principal of P dollars is invested at an annual interest rate r , compounded n times per year, and no further withdrawals or deposits are made to the account, then the future value A , the account balance after t years, is given

$$\text{by the formula } A = P \left(1 + \frac{r}{n} \right)^{nt}.$$

(4) If a principal of P dollars is invested at an annual interest rate r , and is compounded continuously, and no further withdrawals or deposits are made to the account, then the future value A , the account balance after t years, is given by the formula $A = Pe^{rt}$.