

# ACT Database Contents

## A Pre-Algebra

- A Basic operations
- B Place value
- C Square roots and approximations
- D Exponents
- E Scientific notation
- F Factors
- G Ratio, proportion, and percent
- H Linear equations in one variable
- I Absolute value and ordering numbers by value
- J Elementary counting techniques and simple probability
- K Data collection, representation, and interpretation
- L Understanding simple descriptive statistics

## B Elementary Algebra

- A Exponents and square roots
- B Evaluation of algebraic expressions through substitution
- C Using variables to express functional relationships [variation]
- D Understanding algebraic operations
- E [Factoring polynomial expressions]
- F Solving quadratic equations by factoring

## C Intermediate Algebra

- A Quadratic formula
- B Rational and radical expressions
- C Absolute value equations and inequalities
- D Sequences and patterns
- E Systems of equations
- F Quadratic inequalities
- G Functions
- H Modeling
- I Matrices
- J Roots of polynomials
- K Complex numbers

## **D Coordinate Geometry**

- A Graphing equations
- B Graphing inequalities
- C Slope
- D Parallel and perpendicular lines
- E Distance
- F Midpoints
- G Conics

## **E Plane Geometry**

- A Properties and relations of plane figures
- B Properties of circles, triangles, quadrilaterals
- C Transformations
- D The concept of proof and proof techniques
- E Volume
- F Applications of geometry to three dimensions

## **F Trigonometry**

- A Trigonometric relations in right triangles
- B Values and properties of trigonometric functions
- C Graphing trigonometric functions
- D Modeling using trigonometric functions
- E Use of trigonometric identities
- F Solving trigonometric equations