

Math Skill Level Descriptors for ABE / ASE

ABE Level*	Descriptors
6	Adult Secondary Can solve problems using radicals and irrational numbers. Can solve problems involving quadratic expressions, interpret and rewrite polynomials, use function notation, and rearrange formulas to highlight a quantity of interest. Can apply formulas for the volume of cylinders, pyramids, cones, and spheres to solve problems. Can solve problems of density. Can compare multiple data sets containing both dependent and independent variables and make interpretations, including comparisons of statistical variability.
5	High Intermediate Can solve multistep, real-world mathematical problems using rational numbers. Can use linear functions and solve inequalities and simultaneous linear equations. Can solve problems of surface area and volume and apply the Pythagorean theorem in real-world contexts and on coordinate planes. Can understand and apply the concept of probability to draw inferences from statistics. Can solve problems and identify patterns using bivariate data on 2-way tables.
4	Middle Intermediate Can compute using decimals, fractions, and inequalities. Can understand ratios, rates and percentages and use simple square roots and exponents. Can solve real-world problems using linear equations and has a basic understanding of the coordinate plane. Can understand concepts of congruence, similarity, and scale drawings. Can use the Pythagorean theorem and determine measures of center, variability, and derivations from patterns. Can understand and apply the concept of probability.
3	Low Intermediate Can compute with multi-digit whole numbers and decimals. Can solve multistep problems using fractions and ratios and can write and solve one-variable equations using the four operations. Can solve for the area, surface area, and volume of simple shapes. Can understand basic statistical concepts such as mean, median, and mode. Can interpret a wider range of graphs such as histograms and box plots.
2	Beginning Basic Can identify place value for whole numbers to 1,000 and use all four operations to solve one and two-step word problems within 100. Have a basic understanding of fractions. Can use multiplication and division to solve for unknown numbers. Can compare and classify two dimensional shapes, use metric and U.S. customary measurements, and solve for perimeter and area of some shapes. Can interpret simple graphs to solve one and two-step problems.
1	Beginning Literacy Can understand place value for tens and ones and can compute using addition and subtraction and solve for unknown numbers. Can also compare two and three-dimensional figures and measure length using non-standard units, such as with an eraser as a length unit. Can answer basic questions about data points using simple data sets and graphs.

*National Reporting System's (NRS) Educational Functioning Levels (EFLs) for ABE