## ADULT LITERACY FUNDAMENTAL MATHEMATICS (ALFM) LEVEL 5

Students need to demonstrate competency in these outcomes before progressing to the next level. In assessment, it may be determined that some of the outcomes have already been met. In this case, students will focus on the outcomes which still need to be achieved.

In Level 5 the student will be able to:

| NUMBER \& NUMBER OPERATIONS CONCEPTS <br> OPERATIONS AND APPLICATIONS | - Explain or use examples of keywords: <br> - Fraction, numerator, denominator, of (multiplication), proper fraction, improper fraction, mixed number, equivalent fractions, LCD, LCM, reciprocal, prime, composite, GCF, simplify <br> - Identify common fraction as part of a whole <br> - Relate common fractions to decimals <br> - Use a graphic to show a proper fraction (ex: a drawing) <br> - Use a graphic to show a mixed number <br> - Reduce proper fractions <br> - Convert improper fractions to mixed numbers <br> - Convert mixed numbers to improper fractions <br> - Write equivalent fractions <br> - Write mixed numbers as improper fractions <br> - Multiply proper fractions <br> - Multiply improper fractions <br> - Multiply mixed numbers <br> - Divide proper fractions <br> - Divide improper fractions <br> - Divide mixed numbers <br> - Solve multiplication word problems using fractions <br> - Solve division word problems using fractions <br> - Find lowest common multiple <br> - Find greatest common factors <br> - Express a number as a product of prime factors <br> - Add proper fractions with like denominators <br> - Add proper fractions with different denominators <br> - Add mixed numbers with like denominators <br> - Add mixed numbers with different denominators <br> - Subtract proper fractions with like denominators |
| :---: | :---: |


|  | - Subtract proper fractions with different denominators <br> - Subtract mixed numbers with like denominators <br> - Subtract mixed numbers with different denominators <br> - Subtract fractions with borrowing <br> - Solve addition word problems using fractions <br> - Solve subtraction word problems using fractions <br> - Convert fraction to decimals <br> - Convert decimals to fractions |
| :---: | :---: |
| PATTERNS, FUNCTIONS \& RELATIONS CONCEPTS | - Compare fractions to decimals $(<,>,=, \neq)$ <br> - Compare decimals to fractions (<,>,=, $\neq$ ) <br> - Compare fractions (<,>,=, $\neq$ ) <br> - Compare fractions and mixed numbers (<,>,=, $\neq$ ) |
| REAL LIFE APPLICATIONS OPERATIONS AND APPLICATIONS | - Divide a whole into parts (pizza, cake) <br> - Apply operations with fractions to recipes (double, half) <br> - Determine whether it is more appropriate to express a number as a decimal or common fraction in a given situation (ex: $\$ 2.50$ rather than $21 / 2$ dollars ) |
| GEOMETRY <br> OPERATIONS AND APPLICATIONS | - Calculate perimeter of squares with correct formula <br> - Calculate perimeter of rectangles with correct formula <br> - Calculate area of squares with correct formula <br> - Calculate area of rectangles with correct formula |
| SKILLS \& STRATEGIES FOR LEARNING | - Use critical thinking skills <br> - Independently set goals <br> - Independently track progress <br> - Apply logical thinking to fractional operations <br> - Build math confidence <br> - Move onto other tasks while waiting for help <br> - Write tests in a variety of formats <br> - Locate and correct errors <br> - Manage frustrations of learning |

