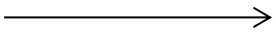

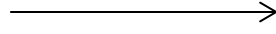

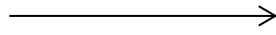
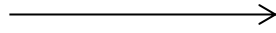
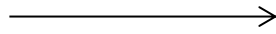


# Community Adult Literacy Benchmarks: Math - Compilation

	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
<b>Number Sense</b>	<ul style="list-style-type: none"> <li>-understand and apply the concepts of counting by 2s, 5s, and 10s, up to 100</li> <li>-solve 1 and 2-digit addition problems</li> <li>-solve 1 and 2-digit subtraction problems</li> <li>-use objects to represent commonly-used fractions. (e.g., 1/2 a chocolate bar)</li> <li>-select the appropriate operation to solve problems involving addition and subtraction of whole numbers</li> </ul>	<ul style="list-style-type: none"> <li>-understand and apply the concepts of counting by 25s, 50s, and 100s to 1000</li> <li>-solve 5-digit addition and subtraction problems</li> <li>-solve multiplication problems (3-digit by 1-digit numbers)</li> <li>-solve division problems (2-digit by 1-digit numbers)</li> <li>-represent and describe proper fractions concretely, pictorially, and with number symbols</li> <li>-understand the relationship between money and decimals</li> <li>-select the appropriate operation to solve problems using the four operations with whole numbers</li> </ul>	<ul style="list-style-type: none"> <li>-describe and represent whole numbers (up to 1,000,000)</li> <li></li> <li>-solve multiplication problems (4-digit by 2-digit numbers)</li> <li>-solve division problems (4-digit by 2-digit numbers)</li> <li>-add and subtract fractions with common denominators</li> <li>-describe and represent decimals (tenths, hundredths, thousandths)</li> <li>-add and subtract decimals</li> <li>-convert common fractions to decimals and vice versa</li> <li>-solve real-world problems involving decimals and fractions</li> </ul>	<ul style="list-style-type: none"> <li>-demonstrate an understanding of percent concretely, pictorially, and symbolically</li> <li></li> <li></li> <li></li> <li>-add and subtract fractions with unlike denominators</li> <li>-multiply and divide fractions with common denominators</li> <li>-multiply and divide decimals</li> <li>-convert common fractions to decimals and percents and vice versa</li> <li>-solve real-world problems using fractions and decimals</li> </ul>
<b>Patterns and Relations</b>	<ul style="list-style-type: none"> <li>-describe, create, reproduce, and extend a repeating pattern, using manipulatives, diagrams, and/or actions (pattern can be from personal experience - schedules, architecture, gardens, quilts)</li> </ul>	<ul style="list-style-type: none"> <li>-describe, create, reproduce, and extend increasing and decreasing patterns, using manipulatives, diagrams, and/or actions</li> <li>-identify and describe patterns found in tables and charts. (e.g., multiplication tables)</li> <li>-solve addition and subtraction equations with one unknown variable (e.g., <math>6 + y = 12</math>)</li> </ul>	<ul style="list-style-type: none"> <li>-identify the pattern rule and make predictions</li> <li>-represent and describe patterns, using graphs and tables (e.g., a number plus one, plus two, etc.)</li> <li>-use simple one-step equations to solve problems with whole numbers (e.g., <math>4c = 12</math>)</li> </ul>	<ul style="list-style-type: none"> <li></li> <li></li> <li></li> </ul>
<b>Space and Shape</b>	<ul style="list-style-type: none"> <li>-show awareness of how measurement is used in day-to-day activities</li> <li>-estimate familiar quantities (e.g., length, volume, weight, time, temperature)</li> <li>-compare familiar quantities (e.g., length, volume, weight, time, temperature) using informal comparative language and methods. (e.g., big, bigger, biggest)</li> <li>-recognize, name, and describe common 2-D shapes. (e.g., square, circle, rectangle)</li> </ul>	<ul style="list-style-type: none"> <li>-measure length, perimeter, area, volume, weight, time, and temperature using common standard units</li> <li>-name, describe, compare, and classify a variety of 2D shapes and 3D objects (e.g., polygons, prisms, pyramids)</li> </ul>	<ul style="list-style-type: none"> <li>-measure length, perimeter, area, volume, weight, time, and temperature with precision using common standard units</li> <li>-use formulas to measure the perimeter and area of rectangles and squares</li> <li>-construct 2D shapes and 3D objects</li> </ul>	<ul style="list-style-type: none"> <li>-make common conversions (e.g., miles to kilometers, pounds to kilograms)</li> <li>-use formulas to calculate the area and perimeter of parallelograms, triangles, circles, and quadrilaterals</li> <li>-construct 2D shapes and 3D objects that meet certain criteria</li> </ul>
<b>Statistics and Probability</b>		<ul style="list-style-type: none"> <li>-collect, organize and record data about self and others, or familiar subjects (e.g., charts, webs, Venn diagram)</li> <li>-describe the likelihood of an outcome, using probability vocabulary such as impossible, possible, against the odds</li> </ul>	<ul style="list-style-type: none"> <li>-choose and use an appropriate method for collecting data to answer a question. (e.g., questionnaire, experiment, observation)</li> <li>-create a bar graph to represent data</li> </ul>	<ul style="list-style-type: none"> <li>-choose and use the most appropriate method to display and analyze data (e.g., circle graphs, scatter plots, stem and leaf plots)</li> </ul>