

<b>Syllabus-EAID CAA Placement Test</b>	
<b>Mathematics-Set 1</b>	
<b>Topics:</b>	
1	<b>Sets &amp; Functions</b>
	<ul style="list-style-type: none"> <li>• Sets: Introduction to Sets, Operations on sets (The difference between two sets).</li> <li>• Functions: Domain of polynomial and rational functions, the value of polynomial function (at specific point), and the composite function</li> <li>• Limits of rational function at Infinity.</li> <li>• Derivative of Natural Logarithm</li> <li>• Determine acceleration from the derivative for Polynomial function.</li> </ul>
2	<b>Algebra</b>
	<ul style="list-style-type: none"> <li>• Convert a complex numbers to polar coordinates</li> <li>• Algebraic solutions of linear inequalities in one variable</li> <li>• Solving the system of equations in two variables</li> <li>• Operation for matrices (<math>2 \times 2</math>) (adding, subtracting, and multiplication )</li> <li>• Solution of linear equation in one variable</li> <li>• Simplify and expand the equations</li> <li>• Arithmetic sequence</li> <li>• Functions of General Angles.</li> </ul>
3	<b>Analytical Geometry</b>
	<ul style="list-style-type: none"> <li>• Circles (Center the origin and radius)</li> <li>• Parabolas (<math>y = x^2</math> and <math>x = y^2</math>) determine the vertex and symmetric axis.</li> <li>• The slope of a line,</li> <li>• Distance between two points.</li> </ul>
4	<b>Calculus- Integration</b>
	<ul style="list-style-type: none"> <li>• Polynomial function.</li> <li>• Trigonometric functions Sine and Cosine.</li> </ul>
5	<b>Probability and Statistics</b>
	<ul style="list-style-type: none"> <li>• Mean and Range from ungrouped data</li> <li>• Introduction to Probability (a single throw with two uniform dice).</li> </ul>