

**Syllabus – HAAS CAA Placement Test**

**Mathematics**

**Topics:**

**Module I: Linear Algebra**

<b>1</b>	<p><b>Simultaneous Equations</b> Solve systems of linear equations using methods such as substitution, elimination, and matrices.</p>
	<p><b>Straight Line</b> Analyze the equation of a straight line, including slope, intercepts, and distance between two points.</p>

**Module II: Trigonometry and Geometry**

<b>2</b>	<p><b>Basic Trigonometry</b> Introduction to trigonometric functions, identities, and applications in problem-solving.</p>
	<p><b>Percentage</b> Understanding percentage calculations, including percentage increase/decrease and practical applications.</p>

**Module III: Arithmetic and Applied Mathematics**

<b>3</b>	<p><b>Speed, Distance, and Time</b> Solve problems involving the relationship between speed, distance, and time using algebraic methods.</p>
	<p><b>Sequence and Series</b> Explore arithmetic and geometric sequences and series, including formulas for the nth term and sum.</p>

**Module IV: Probability**

<b>4</b>	<p><b>Probability</b> Introduction to probability concepts, including probability of single and multiple events and their applications.</p>
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**Module V: Statistics and Data Handling**

<b>5</b>	<p><b>Mean, Median, and Mode</b> Calculate and interpret measures of central tendency (mean, median, mode) from a given data set.</p>
	<p><b>Data Handling</b> Organize, summarize, and interpret data using graphical and numerical methods for better understanding.</p>