

## AP Synthesis

We approach every concept (and you must master every concept) from four different perspectives:  
 Analytic - This is the "x's and y's" equation manipulation that most students think of when they think "math."  
 Numeric - You have to be able to apply calculus concepts to numerical data (lists and tables of numbers).  
 Graphical - You need to be able to interpret, manipulate, and draw graphs relating to calculus concepts.  
 Verbal - You must be able to explain calculus concepts in clear, concise, correct language.

4	3	2	1	0
<p>On cumulative assessments, composed of released AP exam questions:</p> <p>Earns at least 55% on multiple choice proficiency-level questions</p> <p>Responds to the free-response questions, showing evidence of:</p> <ul style="list-style-type: none"> <li>Algebraic processes and computations completed <b><u>logically and correctly</u></b></li> <li>Attend to precision graphically, numerically and analytically</li> <li>Connects concepts and processes to solve <b><u>all</u></b> complex problems</li> <li>Connect and interpret multiple representations in context</li> <li><b><u>Clearly</u></b> present reasoning and <b><u>justification with accurate and precise language</u></b></li> </ul>	<p>On cumulative assessments, composed of released AP exam questions:</p> <p>Earns at least 47% on multiple choice proficiency-level questions</p> <p>Responds to the free-response questions, showing evidence of:</p> <ul style="list-style-type: none"> <li>Algebraic processes and computations completed <b><u>logically, with a minor error</u></b></li> <li>Attend to precision graphically, numerically <b><u>and</u></b> analytically</li> <li><b><u>Connects concepts</u></b> and processes to solve <b><u>multiple</u></b> complex problems</li> <li>Connect and interpret multiple representations <b><u>in context</u></b></li> <li>Present reasoning <b><u>and justification</u></b> without accurate and precise language (using the word, "it"; not using units, etc.)</li> </ul>	<p>On cumulative assessments, composed of released AP exam questions:</p> <p>Earns at least 39% on multiple choice proficiency-level questions</p> <p>Responds to the free-response questions, showing evidence of:</p> <ul style="list-style-type: none"> <li>Algebraic processes and computations set up <b><u>logically but completed with multiple minor errors</u></b></li> <li><b><u>Attend to precision graphically, numerically or analytically</u></b></li> <li>Partially connects concepts and processes to solve <b><u>complex problems</u></b></li> <li>Connect <b><u>and interpret</u></b> multiple representations</li> <li><b><u>Present reasoning</u></b> without accurate and precise language (using the word, "it"; not using units, etc.)</li> </ul>	<p>On cumulative assessments, composed of released AP exam questions:</p> <p>Earns at least 31% on multiple choice proficiency-level questions</p> <p>Responds to the free-response questions, showing evidence of:</p> <ul style="list-style-type: none"> <li>Algebraic processes and computations set up <b><u>logically but completed with major errors</u></b></li> <li><b><u>Partially connects</u></b> concepts and processes to solve <b><u>simple problems</u></b></li> <li>Connect multiple representations</li> <li><b><u>Partially present reasoning</u></b> without accurate and precise language (using the word, "it"; not using units, etc.)</li> </ul>	<p>No response to free response questions</p>

1.2 per MC question + Free

(AB 2015)		
5	70-108	65%
4	58-69	53%
3	46-57	42%
2	38-45	35%

(BC 2015)		
5	63-108	58%
4	53-62	49%
3	42-52	38%
2	36-41	33%