

Name: _____

Period: _____

Chapter 10 Syllabus –Advanced Limit Topics

- Do all of your homework problems....Make sure you TRY all of them!
- Check all of your answers.
- After you have checked your answers, ASK questions on the problems you can't figure out.
- BEFORE test get any additional help needed on concepts not mastered.

NP = Not Proficient**P = Proficient****M = Mastery**

Section	Learning Target	Homework Questions	Self-Evaluation		
			NP	P	M
1-4	<p>I can graph a relation given by parametric equations</p> <p>I can convert between parametric and Cartesian equations</p> <p>I can find the inverse of a relation given in parametric equations</p> <p>I can find the domain and range of a relation given in parametric equations</p>	<p>pg 34 #1-5, 7, 10, 14, 15, 20, 23-28, 33, 34, 37-42</p> <p>pg 535 #1-6</p>	NP	P	M
3-6	<p>I can find the derivatives of parametrically defined curve</p> <p>I can find the second derivative of a parametrically defined curve</p> <p>I can write the equation of the tangent line to a parametrically defined curve</p> <p>I can find the lowest, highest, leftmost, and rightmost points of parametrically defined curve</p>	<p>pg 153 #41, 42, 45-48, 50, 74, 75</p> <p>pg 535 #7-11, 16, 18-21, 23-26</p>	NP	P	M
7-4	<p>I can find the length of smooth curve</p> <p>I can find the length of curve that has vertical tangent lines, corners, or cusps.</p>	<p>pg 416 #1, 2, 4, 6, 11-13, 23-25, 28, 32-37</p>	NP	P	M
10-1	<p>I can find the length of A parametrically defined curve</p>	<p>pg 535 #27-34, 36, 43-50</p>	NP	P	M
10-2 day 1	<p>I can find the magnitude and direction of a vector in component form</p> <p>I can find the x and y components of a vector in polar form</p> <p>I can perform basic vector operations</p> <p>I can find unit vectors</p>	<p>pg 545 #3, 5, 6, 8, 12, 13, 15, 17-22, 25, 26</p>			

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10-2 day 2	<p>I can model motion using a vector equation</p> <p>I can find the velocity, speed, acceleration, and direction vector of a particle whose motion is described by a vector equation</p> <p>I can find the displacement, total distance traveled, and position of a particle whose motion is described by a vector equation</p>	pg 545 #27, 29-31, 35, 37, 38, 40, 43, 45-56			
10-3 day 1	<p>I can convert between Cartesian and polar coordinates.</p> <p>I can graph relations defined by a polar equation</p> <p>I can convert polar equation into parametric equations and graph the curve</p> <p>I can find the slope of a polar curve</p> <p>I can write the equation of a tangent line to a polar curve</p>	pg 557 #1, 4, 5, 8, 12, 13, 17, 19, 23, 26, 28, 32, 36, 39-42, 61, 65, 66			
10-3 day 2	<p>I can find the area enclosed by a polar curve</p> <p>I can find the area between two polar curves</p>	pg 558 #44-56 even, 57-60, 62-64			
Review	<p>I can do AP Free Response Questions of the form:</p> <p>1.) Position, velocity, speed, acceleration, displacement, total distance traveled of a particle whose motion is given by a parametric/vector equation</p> <p>2.) I can find the area inside/between polar curves</p>	pg 560 #9-10, 12, 13, 21-26, 35-41, 48, 49, 51-53			