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Calculus		
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,5-7 ; ,3-4	312	
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Office Hour,		
James Stewart, Calculus, 7 <sup>th</sup> Edition		

5	1.5 Exponential Functions 1.6 Inverse Functions and Logarithms	5	Key Point: Learn some exponential, inverse functions and logarithms.  Difficulty: Be careful to compute the limit of a function.		
6	2.2 The Limit of a Function 2.3 Calculating Limits Using the Limit Laws 2.4 The Precise Definition of a Limit	5	Key Point: Learn the definition of the limit and learn how to compute the limit.  Difficulty: Using the precise definition to prove the limit.		

Key Point: Learn the definition of the continuity and some properties; Learn the definition of horizontal asymptotes.

Difficulty: Show the continuous function on the

2.5 Continuity

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2.6 Limits at Infinity;

its at illimity,

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**Horizontal Asymptotes** 

8	2.7 Derivatives and Rates of Change 2.8 The Derivative as a Function	5	Key Point: Learn the definition of derivatives.  Difficulty: Be careful to compute the higher derivatives.	Quiz 1 Exercises 2.7, 2.8
9	3.1 Derivatives of Polynomials and Exponential Functions 3.2 The Product and Quotient Rules	5	Key Point: Learn how to compute derivatives of polynomials and exponential functions, then get some rules of product and quotient rules.  Difficulty: Be careful to compute the derivative functions using product and quotient rules.	Exercises 3.1, 3.2
10	3.3 Derivatives of Trigonometric Functions 3.4 The Chain Rule	5	Key Point: Learn how to compute derivatives of trigonometric functions and chain rule.  Difficulty: Be careful to compute the derivatives of trigonometric functions and apply the chain rule.	Exercises 3.3, 3.4
11	3.5 Implicit Differentiation	5	Key Point: Learn implicit differentiation and how to compute derivatives of inverse trigonometric functions.  Difficulty: Be careful to compute derivatives of inverse trigonometric functions.	Exercise 3.5

12	Mid-Term Test	5	Mid-Term Test	None	None	None
13	3.6 Derivatives of Logarithmic Functions 3.10 Linear Approximations and Differentials	5	Key Point: Learn the derivative of logarithmic functions and linear approximate differentiation.  Difficulty: Be careful to compute derivatives of logarithmic functions and the linear approximation.		Quiz 2 Exercises 3.6, 3.10	
14	4.1 Maximum and Minimum Values 4.2 The Mean Value Theorem	5	Key Point: Learn absolute maximum and minimum; local maximum and minimum; critical numbers; Learn Rolle's theorem and the mean value theorem. Difficulty: How to find absolute and local values of functions and apply the Rolle's theorem and mean value theorem.		Exercises 4.1, 4.2	

4.3 How Derivatives
Affect the Shape of a
Graph

4.4 Indeterminate Forms

			indefinite integrals.			
18	5.3 The Fundamental Theorem of Calculus	5	Key Point: Learn the fundamental theorem of calculus.  Difficulty: Be careful to understand the fundamental theorem of calculus.		Exercise 5.3	
19	5.4 Indefinite Integrals and the Net Change Theorem	5	Key Point: Learn the indefinite integrals.  Difficulty: Be careful to compute indefinite integrals.		Exercise 5.4	
20	5.5 The Substitution Rule	5	Key Point: Learn how to compute indefinite integrals using the substitution rule.  Difficulty: Be careful to compute indefinite integrals.		Quiz 4 Exercise 5.5	
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