

Ch3: Differentiation Rules	3.1 The Derivative of polynomials and exponential function	<ul style="list-style-type: none"> • Constant functions. • Power functions. • <u>Definition of normal line P.175.</u> • New derivatives from old. • Derivative of the natural exponential function. 	2	1-6, 8	23	3-31(odd), 37
	3.2 The product and quotient rules	<ul style="list-style-type: none"> • The product rule. • Quotient rule. 	1	1-5		3-33(odd)
	3.3 Derivatives of Trigonometric Functions	<ul style="list-style-type: none"> • Formulas 4-6. • Derivative of Trigonometric Functions. 	1	1,2,4	7, 11, 21,	1-7(odd), 51
	3.4 The Chain Rule and Parametric Equations	<ul style="list-style-type: none"> • The Chain Rule. • The power rule combined with the chain rule. • Formula 5. 	2	1- 9	53	1-15(odd), 44, 47, 48
	3.5 Implicit Differentiation	<ul style="list-style-type: none"> • Derivatives of Inverse Trigonometric Functions. 	1	1, 2(a,b), 3-5	12	5-11(odd), 35, 37, 49, 55
	3.6 Derivatives of Logarithmic Functions	<ul style="list-style-type: none"> • Formulas 1-4. • Logarithmic differentiation. 	1	1-8	19, 52	3-15(odd), 21, 31, 43-47
	Ch4: Applications of Differentiation	4.1 Maximum and Minimum Values	<ul style="list-style-type: none"> • Definition 1, 2 • Extreme Value Theorem. • Definition 6 (Critical Number). • Formula 7. • The closed Interval Method. 	2	4, 7, 8	4
4.3 How derivatives affect the shape of a graph		<ul style="list-style-type: none"> • Increasing/decreasing test • The First derivative Test • Definition: (concavity) + Concavity test. • Definition: inflection point • Second derivative test 	2	1, 2, 6	1, 10	9, 12,19