

TEST 1 Content

Calculus I for Electronics Engineering Technology (Dawson College)

Winter 2011 (Instructor E. Richer)

Chapter 23 (The Derivative):

Textbook Section	Topic	Relevant Exercises
§23.1 Limits	<ul style="list-style-type: none">• Limits• Continuity	p.656 25-48, 56-64 p.656 5-24
§23.2 The Slope of a Tangent to a Curve	<ul style="list-style-type: none">• Slope of a tangent line at a specific point• Slope of a tangent line at a general Point	p.660 7-10 p.660 11-22
§23.3 The Derivative	<ul style="list-style-type: none">• Definition of the derivative	p.664 3-40
§23.5 Derivatives of Polynomials	<ul style="list-style-type: none">• Derivatives of polynomials	p.672 5-28, 37-41, 43
§23.6 Derivatives of Products and Quotients	<ul style="list-style-type: none">• Derivatives of products and quotients (polynomial)	p.676 3-32, 35, 39-43
§23.7 Derivative of a Power of a Function	<ul style="list-style-type: none">• Derivatives of powers (polynomial)	p.682 5-36, 41-45

Chapter 24 (Applications of the Derivative):

Textbook Section	Topic	Relevant Exercises
§24.1 Tangents and Normals	<ul style="list-style-type: none">• Tangent and normal lines	p.696 3-5, 7, 8, 11, 13, 14, 17, 20

Chapter 27 (Differentiation of Transcendental functions):

Textbook Section	Topic	Relevant Exercises
§27.1 Derivatives of the Sine and Cosine Functions	<ul style="list-style-type: none">• Derivatives of sine and cosine functions	p.801 3-34, 43-46, 49
§27.2 Derivatives of the Other Trigonometric Functions	<ul style="list-style-type: none">• Derivatives of trigonometric functions	p.804 3-5, 11-14, 19
§27.4 Applications (Trigonometric Functions)	<ul style="list-style-type: none">• Tangent and normal lines	p.811 4, 10
§27.5 Derivative of the Logarithmic Function	<ul style="list-style-type: none">• Derivatives of logarithmic functions	p.816 3-31, 42, 46
§27.6 Derivative of the Exponential Functions	<ul style="list-style-type: none">• Derivatives of exponential functions	p.819 3-24, 27-32, 36-38, 43-52
§27.8 Applications (Logarithmic and Exponential Functions)	<ul style="list-style-type: none">• Tangent and normal lines	p.826 17, 19, 20