

UNIT 2 - From LIMITS to "Derivatives"

LESSON	TOPIC	Page	Exercises	Done
1	The Derivative - Notation and General Form	73	# 1, 4c, 5bc, 6, 7-15, 19, 20	
2	Derivatives of Power Functions	82	Investigation + # 1-18	
3	Derivatives of Power Functions II	84	# 19 -26	
4	The Product Rule	90	# 1-4, 5acf, 6-7, 8a, 9-10	
	Midterm Review	92	# 1, 2cd, 4-9, 12, 14, 16-18	
5	The Quotient Rule	97	# 1-16	
6	Derivative of Composite Functions	105	# 1-16, 18-19	
7	Review	110	# 1-30 (choose any question)	
	Test			

Historical Bite: Female Pioneers in Calculus

In the early development of Calculus, women's names are rare, because they were generally not allowed to go on to higher education. However, several women played a large part, in some cases by deception. Sophie Germain (1776-1831) was not allowed to attend the Ecole Polytechnique in Paris in 1794 because she was a woman. To get around this, male friends obtained lecture notes for her, and she submitted assignments and questions under the false name Monsieur Le Blanc. One hundred years later, Sonja Kovalevsky (1850-1891) was not allowed to study at a foreign university unless she was married. She and her sister found a man willing to marry her so she could go to university. Sonja was the first woman to be granted a doctorate in mathematics. Both Germain and Kovalevsky went on to make important discoveries in Calculus.



Sophie Germain



Sonja Kovalevsky