## Contents

Sect	ion F	Page
· 1.	Introduction	1
2.	Rabbits, Fibonacci Numbers, and Lucas Numbers	2
3.	The Golden Section and the Fibonacci Quadratic Equation	9
4.	Some Geometry Related to the Golden Section	14
5.	Some Fibonacci Algebra	26
6.	Shortcuts to Large $F_n$ and $L_n$	30
7.	Divisibility Properties of the Fibonacci and Lucas Numbers	37
8.	Periodicity of the Fibonacci and Lucas Numbers	42
9.	Pascal's Triangle and the Fibonacci Numbers	48
10.	Selected Identities Involving the Fibonacci and Lucas Numbers	52
11.	Two-by-Two Matrices Related to the Fibonacci Numbers	62
12.	Representation Theorems	69
13.	Fibonacci Numbers in Nature	79
A List of the First 100 Fibonacci Numbers and the First 100 Lucas Numbers		83
Partial Solutions		85
Index		92