

## TABLE OF CONTENTS

## FOREWORD

Chapter 1.	POLYNOMIAL FUNCTIONS . . . . .	1
1-1.	Solutions Exercises 1-1. . . . .	6
1-2.	Solutions Exercises 1-2. . . . .	7
1-3.	Solutions Exercises 1-3. . . . .	11
1-4.	Solutions Exercises 1-4. . . . .	18
1-5.	Solutions Exercises 1-5. . . . .	24
1-6.	Solutions Exercises 1-6. . . . .	27
1-7.	Solutions Exercises 1-7. . . . .	30
1-8.	Solutions Exercises 1-8. . . . .	31
1-9.	Solutions Exercises 1-9. . . . .	33
Chapter 2.	THE DERIVATIVE OF A POLYNOMIAL FUNCTION. . . . .	35
2-1.	Solutions Exercises 2-1. . . . .	38
2-2.	Solutions Exercises 2-2. . . . .	43
2-3.	Solutions Exercises 2-3. . . . .	48
2-4.	Solutions Exercises 2-4. . . . .	50
2-5.	Solutions Exercises 2-5. . . . .	54
2-6.	Solutions Exercises 2-6. . . . .	58
2-7.	Solutions Exercises 2-7. . . . .	63
2-8.	Solutions Exercises 2-8. . . . .	78
2-9.	Solutions Exercises 2-9. . . . .	87
2-10.	Solutions Exercises 2-10 . . . . .	96
2-11.	Solutions Exercises 2-11 . . . . .	99
Chapter 3.	CIRCULAR FUNCTIONS . . . . .	103
3-1.	Solutions Exercises 3-1. . . . .	106
3-2.	Solutions Exercises 3-2. . . . .	115
3-3.	Solutions Exercises 3-3. . . . .	121
3-4.	Solutions Exercises 3-4. . . . .	125
3-5.	Solutions Exercises 3-5. . . . .	129
3-6.	Solutions Exercises 3-6. . . . .	136
3-7.	Solutions Exercises 3-7. . . . .	146

<u>Chapter 4.</u>	<u>DERIVATIVES OF CIRCULAR FUNCTIONS</u>	151
4-1.	Solutions Exercises 4-1.	161
4-2.	Solutions Exercises 4-2.	165
4-3.	Solutions Exercises 4-3.	179
4-4.	Solutions Exercises 4-4.	187
4-5.	Solutions Exercises 4-5.	193
<u>Chapter 5.</u>	<u>EXPONENTIAL AND RELATED FUNCTIONS</u>	203
5-1.	Solutions Exercises 5-1.	204
5-2.	Solutions Exercises 5-2.	206
5-3.	Solutions Exercises 5-3.	209
5-4.	Solutions Exercises 5-4.	213
5-5.	Solutions Exercises 5-5.	214
5-6.	Solutions Exercises 5-6.	219
5-7.	Solutions Exercises 5-7.	225
<u>Appendix 1.</u>	<u>FUNCTIONS AND THEIR REPRESENTATIONS</u>	229
A1-1.	Functions . . . . .	229
	Solutions Exercises A1-1 . . . . .	230
A1-2.	Composite Functions . . . . .	246
	Solutions Exercises A1-2 . . . . .	247
A1-3.	Inverse Functions . . . . .	255
	Solutions Exercises A1-3 . . . . .	256
A1-4.	Monotone Functions. . . . .	262
	Solutions Exercises A1-4 . . . . .	263
A1-5.	Solutions Exercises A1-5 . . . . .	266
<u>Appendix 2.</u>	<u>POLYNOMIALS</u> . . . . .	279
A2-1.	Solutions Exercises A2-1 . . . . .	279
A2-2.	Solutions Exercises A2-2 . . . . .	282
A2-3.	Solutions Exercises A2-3 . . . . .	283