

Contents

Introduction

1	Cauchy's Equations	1
1.1	Additive Cauchy Equation	1
1.2	Logarithmic Cauchy Equation	10
1.3	Exponential Cauchy Equation	12
1.4	Multiplicative Cauchy Equation	13
1.5	Practice Problems	15
2	Generalized Cauchy Equations	19
2.1	Jensen's Equation	19
2.2	Linear Cauchy Equation	21
2.3	Pexider's Equations	22
2.4	Vincze's Equations	25
2.5	Functions Preserving Mean Values	27
2.6	Practice Problems	30
3	Reducing to Cauchy	33
3.1	Examples	33
3.2	Practice Problems	39
4	Substitutions	43
4.1	Theory and Examples	43
4.2	Practice Problems	51