Contents	
Preface	
Acknowledgements	V11
Part I	XIV
One-dimensional integrable systems	
1 Lie groups	
2 Lie algebras	2
3 Factorizations and homogeneous spaces	6
4 Hamilton's equations and Hamiltonian systems	12
5 Lax equations	18
6 Adler-Kostant-Symes	24
7 Adler-Kostant-Symes (continued)	31
8 Concluding remarks on one-dimensional Lax	37
equations	43
Part II	
Two-dimensional integrable systems	
9 Zero-curvature equations	54
10 Some solutions of zero-curvature equations	50
11 Loop groups and loop algebras	64
12 Factorizations and homogeneous spaces	68
13 The two-dimensional Toda lattice	77
14 $\tau$ -functions and the Bruhat decomposition	95
15 Solutions of the two-dimensional Toda lattice	0J 04
16 Harmonic maps from C to a Lie group	94
17 Harmonic maps from C to a Lie group (continued)	50
18 Harmonic maps from C to a symmetric space	105
19 Harmonic maps from C to a symmetric space	115
(continued)	120
<b>20</b> Application: Harmonic maps from $S^2$ to $\mathbb{C}P^n$	126
21 Primitive maps	136
22 Weierstrass formulae for harmonic maps	146

Part III One-dimensional and two-dimensional integrable systems

- 23 From 2 Lax equations to 1 zero-curvature equation15824 Harmonic maps of finite type16225 Application: Harmonic maps from  $T^2$  to  $S^2$ 171
- 26 Epilogue 178
- References187Index193