

Section		Exercises
12	Topological Spaces	Page 83-84 1, 2, 3, 4
13	Basis for a Topology	Page 83-84 5, 8(a)
16	The Subspace Topology	Page 91-92 1, 2, 3
17	Closed Sets and Limit Points	Page 100-102 1, 2, 4, 6, 8, 19
18	Continuous Functions	Page 111-112 1, 2, 3, 4, 5, 6, 13
15	The Product Topology on $X \times Y$	Page 91-92 4, 5, 6; Page 100-102 3, 9, 11, 12, 13, 18, 20
20	The Metric Topology	Page 126-129 1(b), 3, 9, 11
22	The Quotient Topology	Page 144-145 2, 3, 5
23	Connected Spaces	Page 152 3, 6, 9, 11, 12
24	Connected Subspaces of Real Lines	Page 157-158 1(a), 2, 3, 10,
26	Compact Spaces	Page 171-172 3, 4, 5, 6, 7, 8
27	Compact Subspaces of Real Lines	Page 177-178 2, 6
51	Homotopy of Paths	Page 330 1, 3(a), (b)
52	The Fundamental Groups	Page 334-335 1, 2, 4, 5
53	Covering Spaces	Page 341 3, 4, 6
54	The Fundamental Group of the Circle	Page 347-348 3, 6, 7, 8
55	Retractions and Fixed Points	Page 353 1, 3, 4(a), (b), (c), (d), (f)
58	Deformation Retracts and Homotopy Type	Page 366-367 1, 2(a)-(e)
59	The Fundamental Group of $S^n$	
60	Fundamental Groups of Some Surfaces	