

MATH 8020: Graph Theory
Homework

[GYA] Section 1.1: 1, 2, 4, 5, 13-17, 19, 22, 23, 28, 33, 34, 26, 37, 39, 40, 42, 43, 45

[S] Read section 1.1, 1.2

[GYA] Section 1.2: 1-10, 12, 17-24, 29

[GYA] Read Section 1.3: 1, 6, 7, 10

[GYA] Section 1.4: 1-4, 9-11, 14-17, 20-23, 25

[GYA] Section 1.5: 1-4, 6, 9, 10, 15-19, 27-29

[S] Read 1.3-1.5

[S] Section 1.6: 2, 4, 5, 9, 10

[S] Read 2.1, 2.2

[S] Section 2.4: 4, 5, 6

[GYA] Section 2.1: 1-3, 5, 6, 11-13, 15-17, 20

[GYA] Section 2.2: 1-4, 9, 10, 13

[GYA] Section 2.3: 1-4, 19-22, 33, 34, 36, 41, 42

Let G be any graph with n vertices. Prove $\alpha(G) + \omega(G) \leq n + 1$. HINT! Consider the set intersection.

[GYA] Section 2.4: 1-5, 8-11

[GYA] Section 3.1: 1-4, 10-14, 16, 21

[GYA] Section 3.2: 1, 2

[GYA] Section 3.7: 1-12

[S] Read 4.1, 4.2

[S] Section 4.5: 1-3

[GYA] Section 8.1: 1-9, 26, 44-46

[S] Read Section 6.1, 6.2

[S] Section 6.6: 3, 4, 5

[GYA] Section 8.3: 1-8, 14-20

[S] Section 5.5: 2-5, 7-9, 12, 13