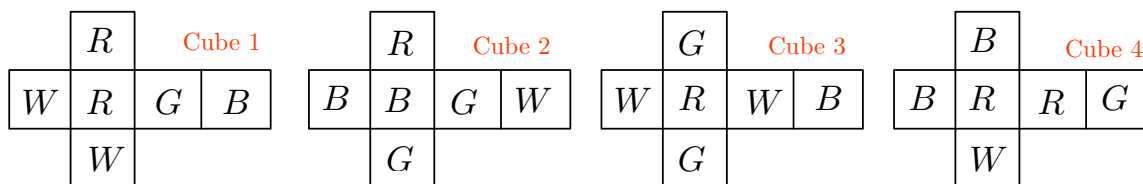
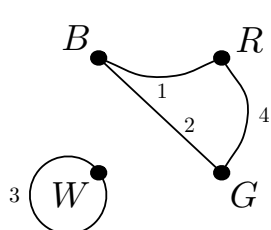
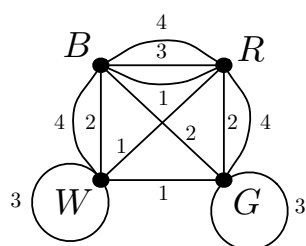


► **Problem 9.1-4(c)**

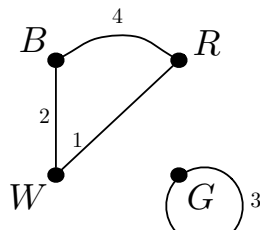
Find solution , where possible, for the cube games pictured in the following figure.



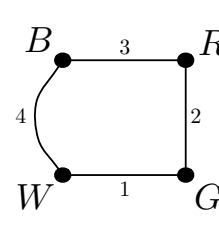
**Solution.** There are three edge disjoint subgraphs, as shown below. One solution is the pair of subgraphs 1 and 2, the second solution is the pair of subgraphs 1 and 3, and the last solution is pair of subgraphs 2 and 3.



subgraph 1



subgraph 2



subgraph 3

The solutions indicated are

	Front	Back	Right	Left
cube 4	R	G	B	R
cube 3	W	W	G	G
cube 2	G	B	W	B
cube 1	B	R	R	W

	Front	Back	Right	Left
cube 4	R	G	B	W
cube 3	W	W	R	B
cube 2	G	B	G	R
cube 1	B	R	W	G

	Front	Back	Right	Left
cube 4	B	R	B	W
cube 3	G	G	R	B
cube 2	W	B	G	R
cube 1	R	W	W	G

□