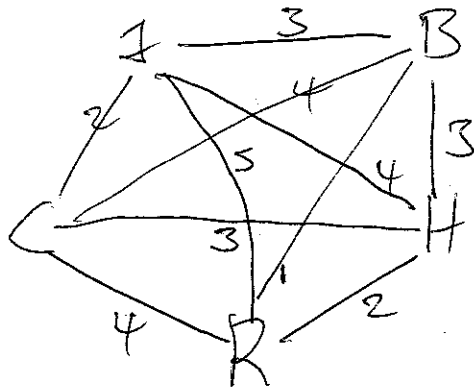
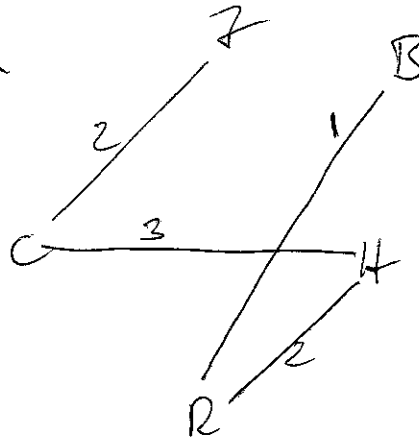


hw7 1:

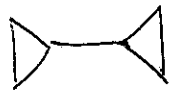


min weight spanning tree



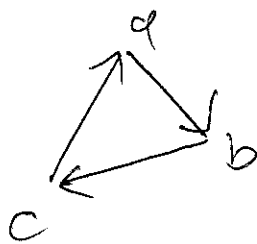
weight 7

#2:

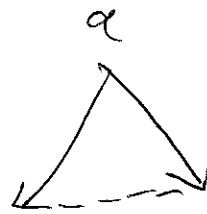


(bridge)

#3:



but not



either way

every good triangle has exactly one vertex where 2 edges come out

$$\Rightarrow \# \text{good } \Delta = \sum_i \binom{S_i}{2}$$

$$\Rightarrow \# \text{bad } \Delta = \binom{4}{3} - \sum_i \binom{S_i}{2}$$

#4

5	1	6	7	2	8	9	10	3	11	4
1	4	2	2	4	3	3	3	4	4	12