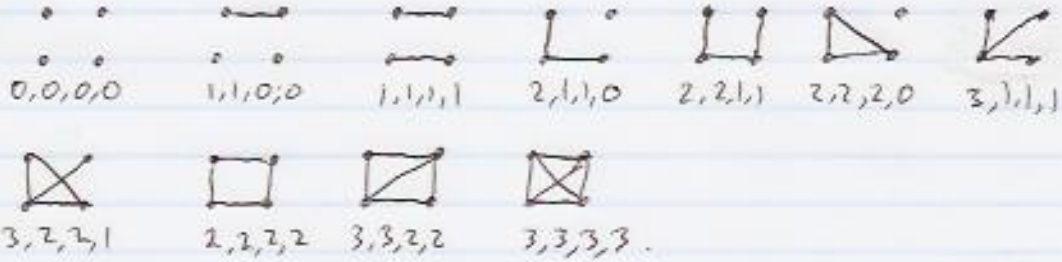
§9-3 Homework Solutions

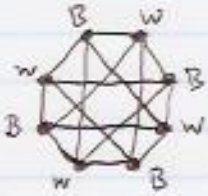
1) [BB] 2) a) b)

3 a) [BB] b) 

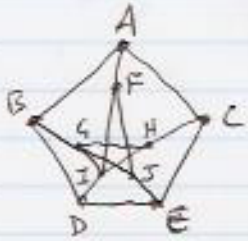
4) a) No, the right graph has a degree 4 vertex, left one doesn't. b) [BB]

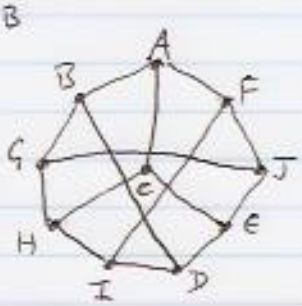
c) No. The degree 3 vertex on the left is connected to two vertices of degree 1 while - - - - - - - - - - right - - - - - one vertex of degree 1.

d) Yes. $A \mapsto r$, $B \mapsto w$, $C \mapsto p$, $D \mapsto q$, $E \mapsto s$, $F \mapsto v$, $G \mapsto t$, $H \mapsto u$ is one possibility.

5 a) [BB] b) Yes 

every black vertex is connected to every white vertex and no other edges exist.

6) Yes 

& 

for example

10) The graph on the left only has ~~one~~ two cycle of length 4, the one on the right has ~~two~~ three