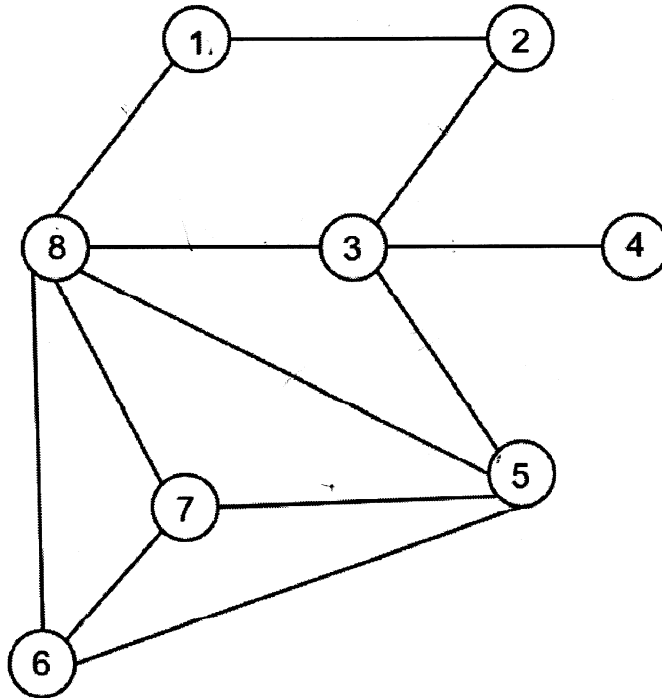


PB 2

NAME: _____

Duc Dang

Use hill climbing to find a clique of size 4 in the graph below, starting from the start states given in the table below. For each new *best* neighbor, write how many pairs of adjacent vertices there are in the new set.

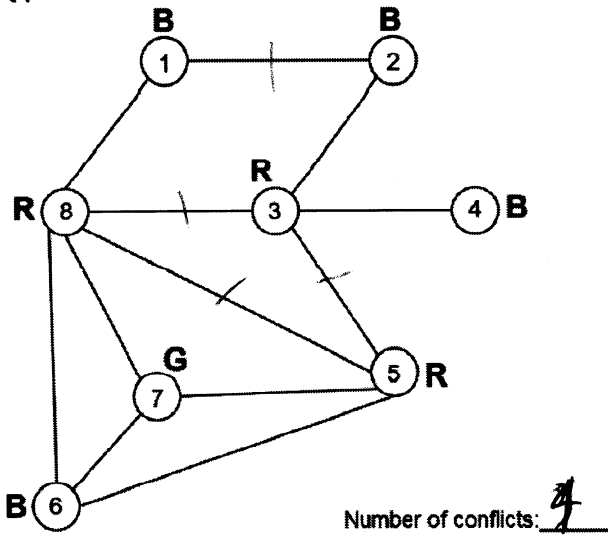


PB 2(a)			PB 2(b)			PB 2(c)		
	Set of size 4	Num Edges		Set of size 4	Num Edges		Set of size 4	Num Edges
START	1, 2, 3, 4	3	START	3, 4, 5, 8	4	START	1, 2, 4, 6	1
best neighbor	1, 2, 3, 8	4	best neighbor	3, 5, 7, 8	5	best neighbor	1, 2, 3, 6	2
best neighbor	2, 3, 5, 8	4	best neighbor	5, 6, 7, 8	6	best neighbor	1, 2, 3, 5	3
best neighbor	3, 5, 7, 8	5	best neighbor			best neighbor	2, 3, 5, 8	4
best neighbor	5, 6, 7, 8	6	best neighbor			best neighbor	3, 5, 7, 8	5
best neighbor			best neighbor			best neighbor	5, 6, 7, 8	6

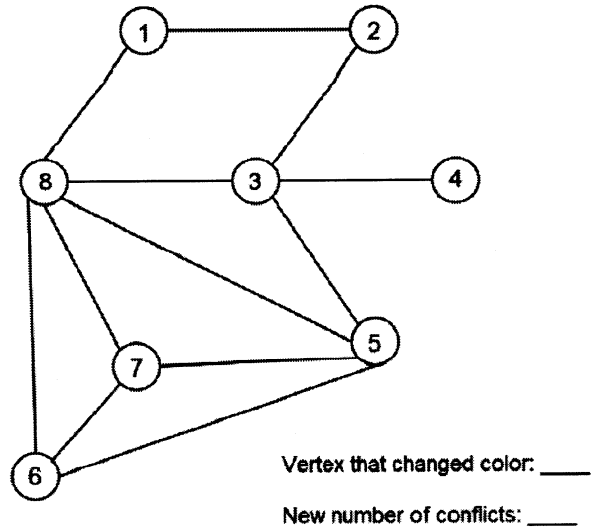
PB 3(a) **3 Colors: R, B, G**

NAME: Duc Dang

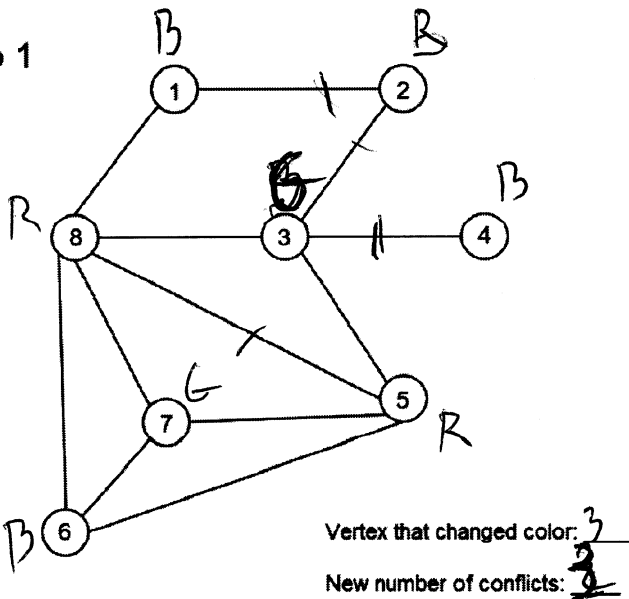
START



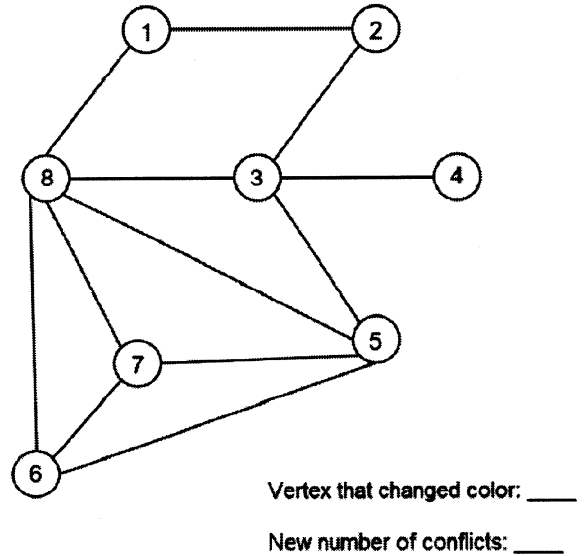
Step 3



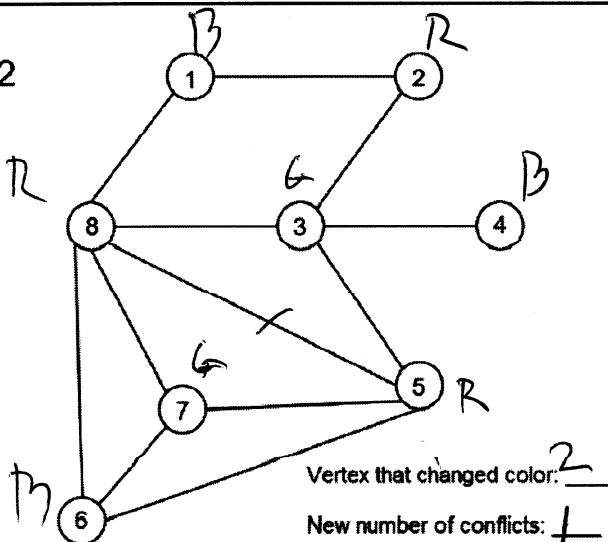
Step 1



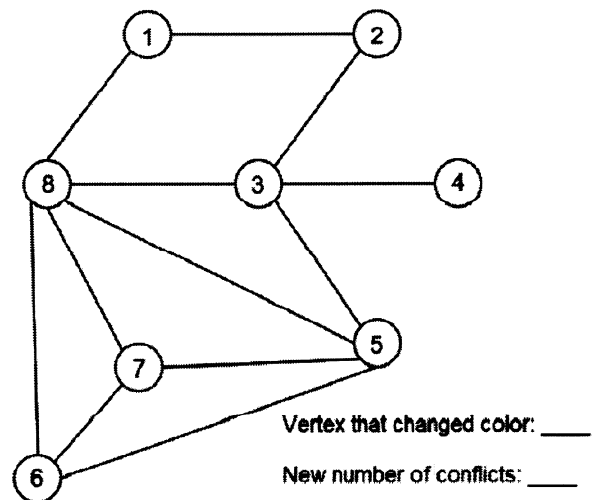
Step 4



Step 2

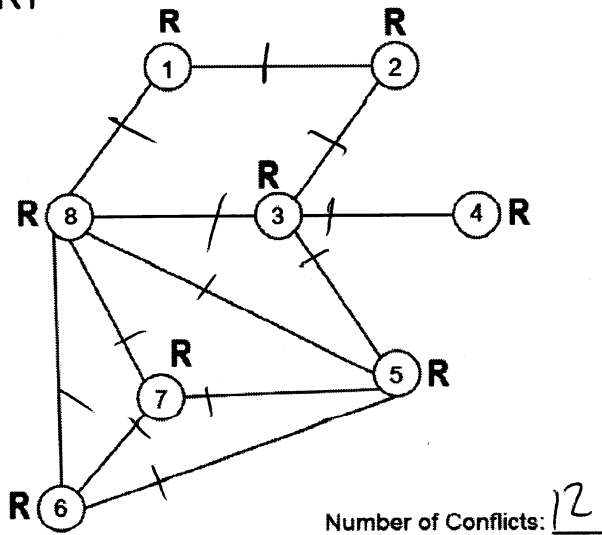


Step 5

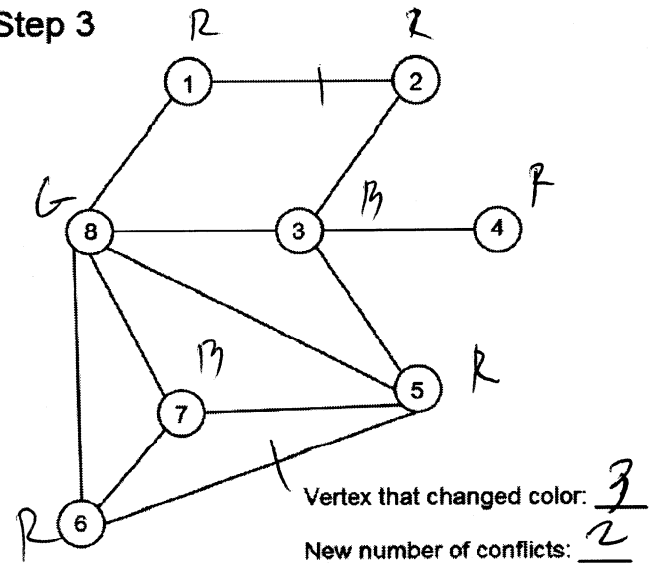


PB 3(b) 3 Colors: R, B, GNAME: Duc Dang

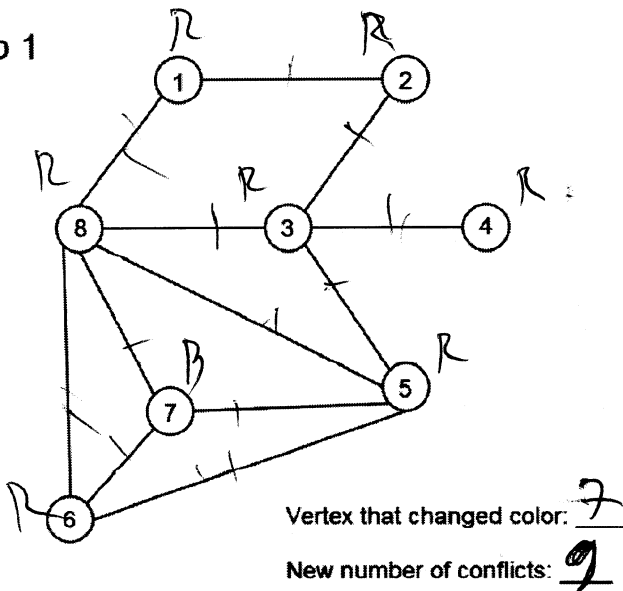
START



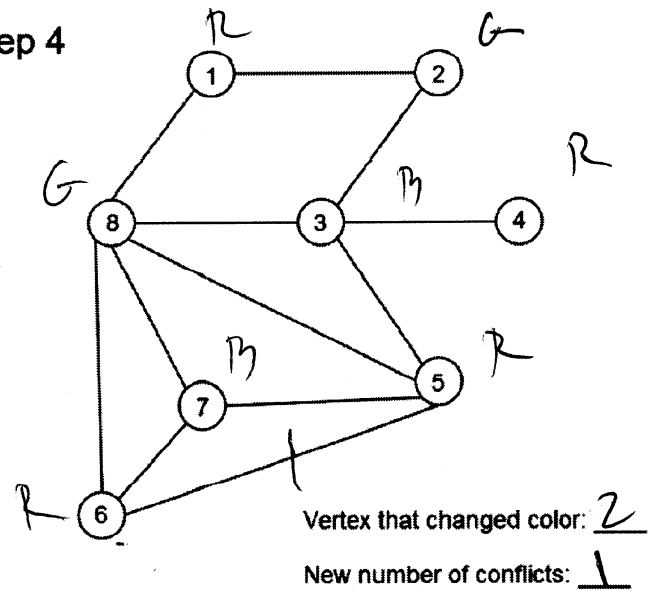
Step 3



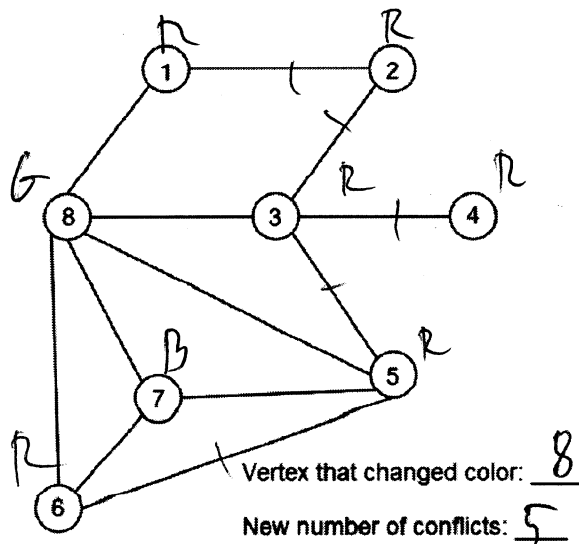
Step 1



Step 4



Step 2



Step 5

