

Re: Three question about graph coloring

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I am sorry about that I forgot that
I cannot use some special symbol here
so I rewrite the first article.

$A \wedge S \wedge B :=$ the set of intersection for set A and set B
 $A \vee S \vee B :=$ the set of union for set A and set B
 $X(G) :=$ chromatic number of simple graph G

To define the function CLRS: {graphs} \rightarrow { sets of function(s) }
s.t. $G \mapsto \{f \mid f:V(G) \rightarrow \{1,2,\dots,X(G)\} \text{ is proper coloring} \}$

Suppose G, H be any simple graph...
Is " $CLRS(G)=CLRS(H) \Leftrightarrow G$ is isomorphic to H " ?
Is always exist simple graph F s.t. $CLRS(F)=CLRS(G) \wedge S \wedge CLRS(H)$?
Is always exist simple graph F s.t. $CLRS(F)=CLRS(G) \vee S \vee CLRS(H)$?

At first, I never know the discussion for set of coloring.
I just get the idea, but I'm not ensure whether it's good or bad.
I just get a new thinking about this.

Is any book ever talk about something like this?

Thank you.

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