

# Re: Three question about graph coloring

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I am sorry about that I forget that some symbol couldn't use here.

so,I repost about my question.

$X(G)$ := chromatic number of simple graph  $G$

$A \wedge S \wedge B$ := the intersection of  $A$  and  $B$

$A \vee S \vee B$ := the union of  $A$  and  $B$

Define a 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 isomophic 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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