

(Proper) coloring of a graph = a way of coloring the vertices so that no two adjacent vertices have the same color.

k -coloring = a coloring that uses exactly k colors.
(If a k -coloring of G exists, say that G is **k -colorable**.)

Chromatic number $\chi(G)$ = smallest k so that G is k -colorable.

Warm-up_: find $\chi(G)$

