

(Proper) edge-coloring of a graph = way of coloring the edges so that no two edges sharing a vertex have the same color.

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

Edge-chromatic number or **chromatic index** $\chi'(G)$
= smallest k so that G is k -edge colorable.

What is $\chi'(G)$?

