Let G and L denote two graphs. By $\chi_s(G < L)$ we mean the minimum number of colors required to color the vertices of G so that any subgraph of G isomorphic to L has all of its vertices assigned different colors. Given integers n and e,

$$\chi_s(n, e, L) = \min_{G \in \mathcal{G}} \{\chi_s(G, L)\}$$

where $\mathcal{G}$ is the class of all graphs on n vertices with e edges. Thus, $\chi_s(n, e, L)$ is an "extremal anti- Ramsey number". This paper is devoted to the study of these numbers. It contains some specific values, some bounds and some asymptotic results. It closes with a discussion of several interesting open questions.

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