Brouwer, A. E.; **Mills, C. F.**; **Mills, W. H.**; **Verbeek, A.**
Counting families of mutually intersecting sets. (English) Zbl 1267.05144
Electron. J. Comb. 20, No. 2, Research Paper P8, 8 p. (2013).

Summary: We show that the number of maximal intersecting families on a 9-set equals 423295099074735261880, that the number of independent sets of the Kneser graph $K(9,4)$ equals

$$36699624456864386434 0,$$

and that the number of intersecting families on an 8-set and on a 9-set is

$$147040221446271617807443683386959252931425075 20$$

and

$$125532424879405039143639827181122982679752727208$$
$$080107578090327056505910230155204626774753 28$$

(roughly $1.255 \cdot 10^{91}$), respectively.

MSC:

05C30 Enumeration in graph theory
05C75 Structural characterization of families of graphs

Keywords:

maximal linked systems; Kneser graph; counting independent sets

Full Text: Link