## Discrete Mathematics and its Applications

Ngày 18 tháng 9 năm 2011

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## Question

How many subsets can a family $\mathbb{F} \subset P(A))$ have if any two subsets have exactly one element in common?

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Can we construct a a family $\mathbb{F} \subset P(A)$ such that each subset has the same size $k$ and every member of $A$ belongs to exactly $k$ subsets?

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## Remark

Note that if all memebers of $\mathbb{F}$ have the same size then no subset containc another cubset חnoc thic diup uc a clue to the ancumer?

