Theorem 22. *For every $n \geq 4$ and every hypergraph $\mathcal{H}$ of order n,*

$$\min\{\gamma(\mathcal{H}) + \gamma^{-1}(\mathcal{H}), \gamma(\overline{\mathcal{H}}) + \gamma^{-1}(\overline{\mathcal{H}})\} \leq 4$$

and the bound is tight.

Proposition 23. *For every integer $n \geq 7$, there exists a hypergraph $\mathcal{H}$ of order n with $\gamma(\mathcal{H}) = i(\mathcal{H})$ but $\gamma\gamma(\mathcal{H}) \neq \gamma(\mathcal{H}) + \gamma^{-1}(\mathcal{H})$.*

Theorem 24. *For every integer $k \geq 1$ there exists a connected hypergraph $\mathcal{H}$ such that $\gamma(\mathcal{H}) + \gamma^{-1}(\mathcal{H}) - \gamma\gamma(\mathcal{H}) = k$.*

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