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Garry S Bowlin* (bowlin@math.binghamton.edu), Department of Mathematical Sciences,
Binghamton University, Binghamton, NY 13902-6000. *Examples of Highly Frustrated Matrices.*

For an $n \times m$ matrix M with entries in $\{0, 1, -1\}$, the frustration index is the least number of negative entries of $D_1 M D_2$ over all D_1, D_2 diagonal ± 1 matrices. An $n \times n$ matrix H is said to be Hadamard if $HH^T = nI$. I will demonstrate some bounds on the frustration index of Hadamard matrices and what this implies for the frustration index of more general matrices. (Received September 21, 2010)