## MATHEMATICS

The $\mathrm{n}+\mathrm{k}$ kings problem. R. DOUGLAS CHATHAM, Department of Mathematics and Physics, Morehead State University, Morehead KY 40351.

The " n -kings problem" asks for arrangements of n pieces on an n -by- n board so that no two pieces attack each other as kings or as rooks. We add pawns to the problem and show that for $\mathrm{n}>\mathrm{k}+4$, we can place k pawns and $\mathrm{n}+\mathrm{k}$ kings on an n-by-n board so that no two kings attack each other as kings or as rooks.

