

**University of Colorado**  
**Department of Mathematics**  
**Problem of the Month**  
**February 2012**

A  $47 \times 47$  square is divided into smaller squares of dimensions  $1 \times 1$ ,  $2 \times 2$  and  $3 \times 3$ . What is the minimum possible number of  $1 \times 1$  squares?