Arie Bialostocki and Mark J. Nielsen* (markn@uidaho.edu), Department of Mathematics, PO Box 441103, University of Idaho, Moscow, ID 83845-1103. Minimum Sets Forcing Monochromatic Triangles.

For a given triangle $T$, consider the problem of finding a finite set $S$ in the plane such that every two-coloring of $S$ results in a monochromatic set congruent to the vertices of $T$. We show that such a set must have at least seven points. Furthermore, we show by example that the minimum of seven is achieved. (Received September 19, 2007)