1054-05-286 Karsten O. Chipeniuk* (karstenc@math.ubc.ca), Room 121, 1984 Mathematics Road, Vancouver, BC V6T 1Z2, Canada. Sums and Products of Distinct Sets in $\mathbb{C}$.
Let $k$ and $l$ be integers, and let $A$ and $B$ be large finite subsets of $\mathbb{C}$. We show that if the productset $|A B|<\alpha|A|$ for some $\alpha$, which is not too big, and if $A$ and $B$ have comparable size, then the iterated sumset $k A+l B$ is large. The proof generalizes an argument of Chang for the case $A=B$. (Received September 15, 2009)

