

1114-00-157 **Alvin Kim*** (alvin.kim@live.com), 22529 Kent Avenue, Torrance, CA 90505. *Exploring Inequalities.*

We all probably know the basic inequality relationships: QM (or RMS)-AM-GM-HM, rearrangement inequality, and Cauchy-Schwarz inequality. I will show that we can manipulate these simply-seeming relationships for proving problems that look complicated, with hardly any use of other relationships. The majority of the problems come from the *Gazeta matematica* and have been distributed during the workshops of Fullerton Mathematical Circle. Also included in the talk, is an inequality that I managed to generalize and successfully proved, using only the basic inequality relationships as building blocks. (Received August 24, 2015)