Homework 12, REALLY Due Tue May 7, 2013
(I REALLY Want it on May 7 so I can go over it that day.)
(The symbol before gasarch is a tilde.)

1. (0 points) What is your name? Write it clearly. Staple your HW.
   When is the FINAL (give Date and Time)? If you cannot make it in that day/time see me ASAP. Join the Piazza group for the course. The codename is cmse858.

2. (50 points) Show that $W(k, c) \leq W(W(k, c - 1), 2)$. Why does this NOT suffice to prove VDW’s theorem.

3. (50 points) Prove the following rigorously (that is, make formal what I did with examples): If $(a_1, \ldots, a_n)$ is a tuple of $n$ integers such that NO subset sums to 0 then there is a number $c$ and a coloring $COL : \mathbb{N} \rightarrow [c]$ such that there is NO mono solution to $\sum_{i=1}^{n} a_i x_i = 0$. 