MA 310 Homework #3

Due Friday, January 25

1. Prove that the number z in "Animal Colors" must always be 1089.

2. Solve "Ones and Twos".

3. Solve "Regions of the Plane". Find and justify a closed formula (not involving a summation).

4. Solve "Summing Cubes". Find and justify a closed formula (not involving a summation), proving your formula by mathematical induction.

5. Solve "Two-Cube Calendar".