**Hard LP Hints**

Problems **5)**, **2)** and **7)** are probably the most accessible. These are listed in order from “easiest” to “hardest.”

**2)** This one is similar to ICE 5 problem 2. 12 variables, 12 constraints.

**5)** 12 variables, about 14 constraints. In this one we are combining three ingredients – Tall Fescue grass seeds, Mustang Fescue grass seeds and Bluegrass seeds in order to make three products – Home 1, Home 2 and Commercial 3.

Let variables be T1, M1, B1, H1; T2, M2, B2, H2 and T3, M3, B3, H3. T1 is the amount of Tall Fescue that goes into the Home 1 mix and so on. H1 is the total amount of Home 1 mix.

**7)** Six variable and *only* 3 constraints, but of course it’s tricky to figure out what variables are.

**6)** 17 variables and 18 constraints. Sounds massive, but most of it is repetitive – if you can figure out one constraint, the rest look exactly the same. Variables are regular production, overtime production and inventory.

**4)** Laughably so out-of-date! 9 variables and 16 constraints, but really two sets of 8 constraints that look the same.

**3)** At least 12 variables and a boat load of constraints. Rename Mines 1, 2 and 3 to Mines X, Y and Z. For “combined” constraints, double the amount allowed, so 5% of ash and sulfur combined means 10% total, etc.