**Hands On 1**

**Due Sep 12, 2018, 11:59 p.m**

**Feeding Problem**

Suppose Joe wants to produce live cattle feed. Corn, hay and soybeans are the only three resources he could use. The prices and nutrient of the three ingredients are listed in the table below. The feed should provide at least 0.05 unit protein, 0.09 unit Vitamin A, and 0.15 unit Vitamin C. The amount of protein cannot access 0.2 unit as well.

Table : Price and Nutrient Table

|  |  |  |  |
| --- | --- | --- | --- |
|  | Corn | Hay | Soybean |
| price | 3 | 4 | 5 |
| Protein | 0.01 | 0.04 | 0.07 |
| Vitamin A | 0.02 | 0.14 | 0.1 |
| Vitamin C | 0.15 | 0.05 | 0.2 |

1. Set up the model in GAMS and solve it.
2. Solve the model when the corn price increases to $6
3. Solve the model when the minimum requirement of vitamin A is set to zero

Requirements

* Create HandsOn1\_LastNameOfOneGroupMember.gms with \* your name(s) in the first line of the code.
* Make comments in your code.
* Turn in an electronic copy of \*.gms file for ALL parts via email.
* You can work as a group with no more than three people.