**HW Linear Programming**

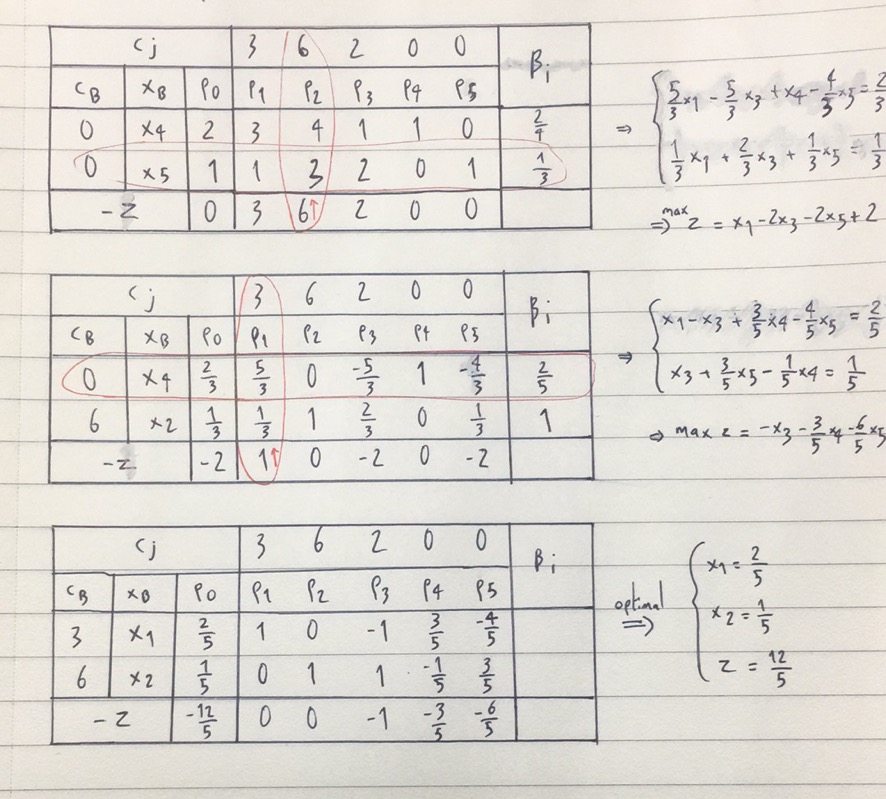
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1. **Solving the following linear program using simplex method**



The above equations could be rewritten in augmented form.

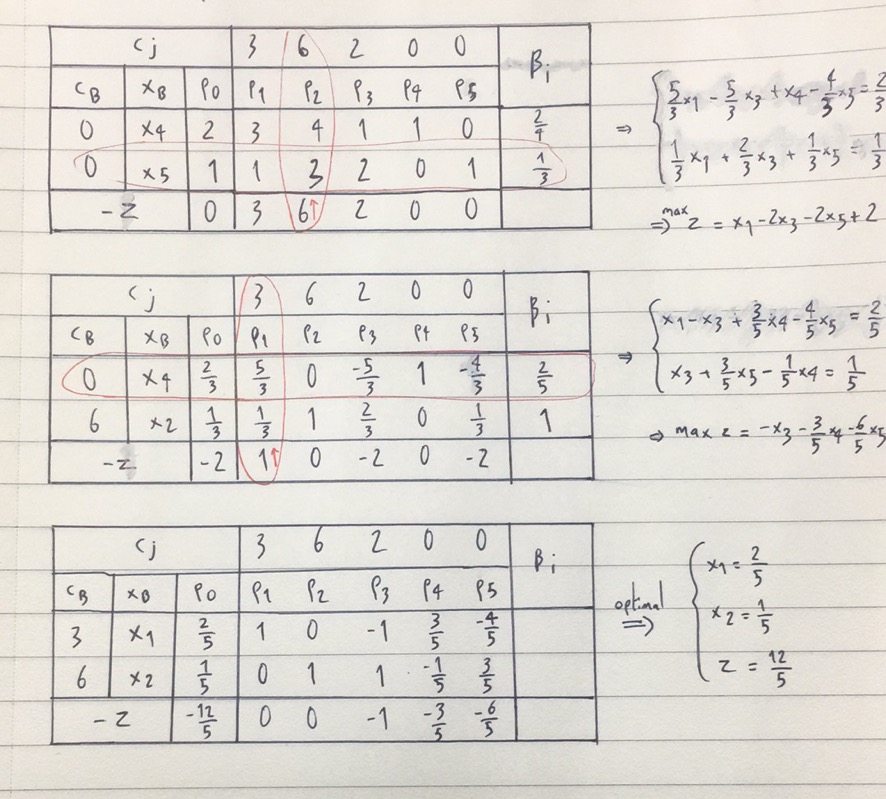
Accordingly, the table would be as follows



Let be a basic variable. Accordingly, by modifying the above equations, we have

Simplifying the top two equation gives

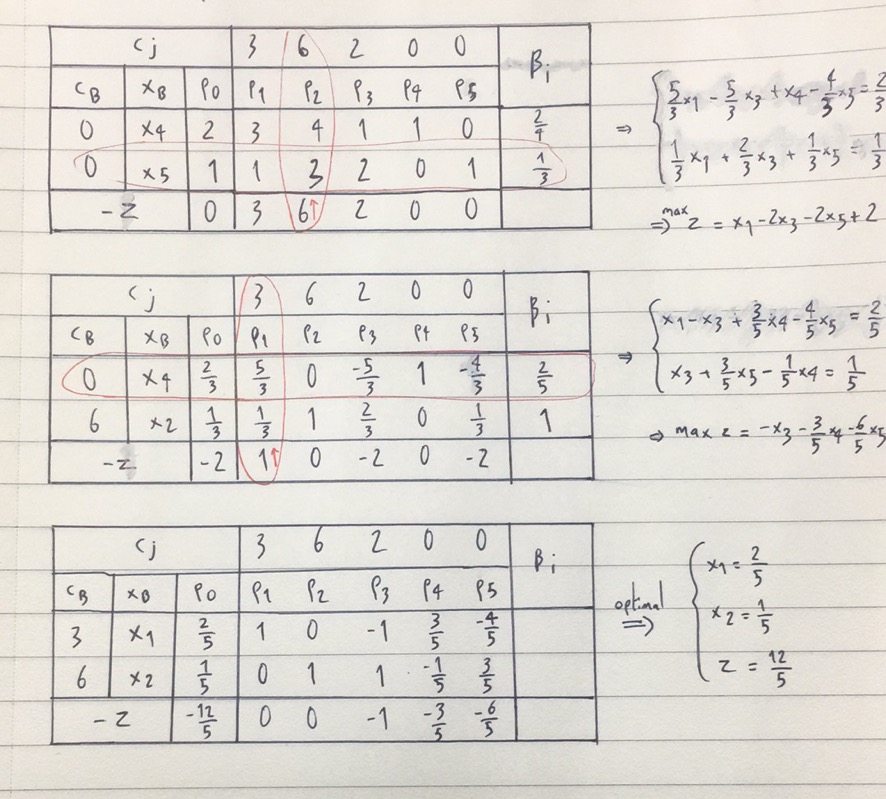
And the program can be written as



Let be a basic variable. Accordingly, by modifying the above equations, we have

Simplifying the lower two equation gives

And the program can be written as



Therefore, the optimal solution would be