

MAT631 PROBLEM SET 7

MANJIL SAIKIA

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Instructions. Please read the instructions on the course website carefully before submitting your solution(s).

Questions.

- (1) (**Shubham**) Prove that $\omega(s_\lambda) = s_{\lambda'}$, for some partition λ .
- (2) (**Anant**) Give a detailed proof of the Cauchy identity involving power sum symmetric functions.
- (3) (**Anubhav**) Give a detailed proof of equation (4.10) from the textbook.
- (4) (**Kanak**) Give a detailed proof of equation (4.27) from the textbook.