

Mini report #1 (Advanced Automation) 2015.11.12

Student #: _____ Name: _____

[NOTICE]

- write by hand
 - due date: 2015/11/18 17:00; place of submission: room 405(機械建設 1号棟 小林)
 - check if your answer is correct or not before submission by using Matlab
-

Let M be a matrix given as:

$$M = \begin{bmatrix} \frac{1}{\sqrt{2}} & \frac{1}{\sqrt{2}} \\ j & -j \end{bmatrix}.$$

Answer the followings:

(1) \bar{M}

(2) M^*

(3) M^*M

(4) $\lambda_i(M^*M)$

(5) $\sigma_i(M)$

(6) $\bar{\sigma}_i(M)$