IML- EX2

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Solutions of the Normal Equations:

Q1:

We use the Kerr definition :

and the fact that :

And the proof:

First side:   
let

so we know that from 1) ,

multiple both sides by in the left side and get

From the second side:   
Let

so from 1)

multiple both from the left in and get use the transpose   
from 2) we get that   
and because it is Norm we get   
and from 1)