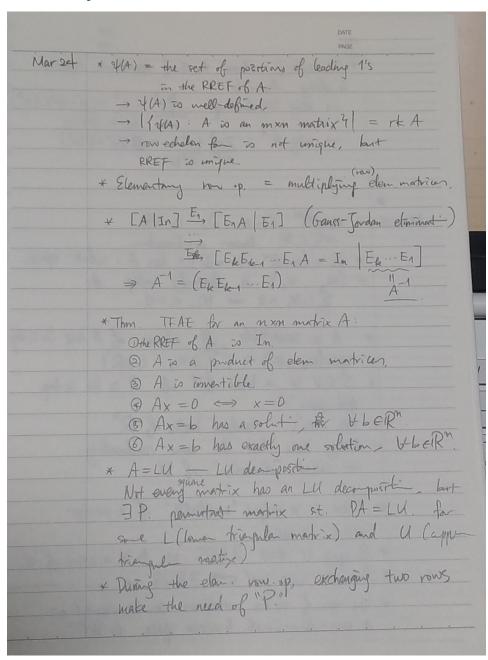
## Quiz 2

## Problems

<sup>\*</sup>the sum of all components  $\rightarrow$  the square sum of all components

## Summary



DATE
* LU decomp reduces the # of operations required  in solving $A \times = b$ The solving $A \times =$
***
Mar 26. $\star$ $V_{-} \in \mathbb{R}^{m}$ $(\overline{c}=1,,s)_{-}$ $c_{-} \in \mathbb{R}$ . $\Longrightarrow$ $C_{-} V_{-}$ : Inverse or bination $\star$ $V_{-} = 1 \times c \times c \times c$ $\star$
* A is invertible iff columns of A are tin. indep.  * Span ( Wy, Ws 7 = { \in C. E.R. Y }  * S \in V is a basis of V if S is lin. indep.  and spans V.  * { \in, \in \gamma : Standard basis of R.  * Every basis has the same condinality.  -> called "dimension" of V.
the state of the s
* There is a unique "coordinate" of a vector v.r.t. a basis.
* S spans V ( ) = BES St. B is a basis of V.  * S To I'm, Tradep In V ( ) = BES St "
* the space of mxn madrices an be viewed as a mon-timensional & vector space. \$ Rmm.