線形代数 演習-II

/ /

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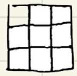
○ 行列 matrix a_{32}



○ 行列の積 $\begin{pmatrix}3&2\\1&2\end{pmatrix}\begin{pmatrix}3&2\\1&2\end{pmatrix} = \left(\underline{\qquad\qquad}\right) = \left(\underline{\quad}\right)$

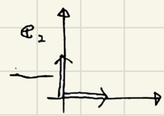
○ 行列とベクトルの積 vector

$\begin{pmatrix}3&2\\1&2\end{pmatrix}\begin{pmatrix}1\\0\end{pmatrix} = \underline{\qquad}$

$\begin{pmatrix}3&2\\1&2\end{pmatrix}\begin{pmatrix}0\\1\end{pmatrix} = \underline{\qquad}$

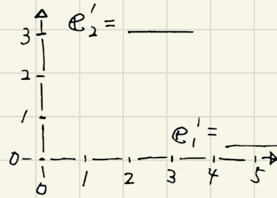
$\begin{pmatrix}3&2\\1&2\end{pmatrix}(1\ 0) = \underline{\qquad}$

$(1\ 0)\begin{pmatrix}3&2\\1&2\end{pmatrix} = \underline{\qquad}$



$e_1 = \underline{\qquad}$

$e_2' = \underline{\qquad}$



$e_1' = \underline{\qquad}$

○ 行列式 determinant $|A|$ or $\det A$

$\begin{vmatrix}3&2\\1&2\end{vmatrix} = \underline{\qquad\qquad}$

○ 基本操作

	行列	行列式
連立方程式		
掃き出し		
		$\lvert A\rvert = \lvert {}^tA\rvert$
行・列・行と列		

転置 ${}^t\begin{pmatrix}3&2\\1&2\end{pmatrix} = \underline{\qquad}$

○ 行列式 サラス $\begin{vmatrix}1&0&1\\2&1&0\\0&1&2\end{vmatrix} = \underline{\qquad\qquad\qquad} = \underline{\quad}$

○ 余因子展開 $\begin{vmatrix}1&0&1\\2&1&0\\0&1&2\end{vmatrix} = a_{21}(-1)^{2+1}D_{21} + a_{22}(-1)^{2+2}D_{23} + a_{23}\cdots$

○ 逆行列
連立方程式の解(クラメール) $\longleftrightarrow$

$\Leftarrow$ ______ で換算