Cheatsheet for 001-007-linalg.tex

$$\begin{array}{ll} \left\{ \begin{array}{ll} \text{exBasics} & A^{\text{T}}, \ A^{-1}, \ A^{+}, \ \det(A) \ , \ \operatorname{Tr}(A) \\ x, \ y, \ z, \ a+b \\ \text{exVecArrow} & \overrightarrow{x}, \ \overrightarrow{y}, \ \overrightarrow{z}, \ \overrightarrow{a+b} \\ \text{exDotProducts} & \overrightarrow{x}, \ \overrightarrow{y}, \ \overrightarrow{x}, \ \overrightarrow{y}, \ (\mathbf{x}|\overrightarrow{y}) \ , \ \mathbf{x}^{\text{T}}\overrightarrow{y} \\ \text{exLinear} & \theta^{\text{T}}\varphi(x) + b \\ \left[\begin{array}{ccc} a & b \\ c & d \end{array} \right] \left[\begin{array}{c} x \\ y \end{array} \right] = \left[\begin{array}{ccc} ax + by \\ cx + dy \end{array} \right] \\ \text{exDots} & \left[\begin{array}{ccc} 1 & \cdots & 0 \\ \vdots & \ddots & \vdots \\ 0 & \cdots & 0 \end{array} \right], \left[\begin{array}{ccc} 0 & \cdots & 1 \\ \vdots & \ddots & \vdots \\ 1 & \cdots & 0 \end{array} \right] \\ \text{exMecaQ} & \left\langle \varphi|\psi\rangle \ , \ \langle \varphi| \ , \ |\psi\rangle \ , \ \langle \varphi||\psi\rangle \ , \ \langle \varphi|A|\psi\rangle \end{array}$$