1.13 $\quad \mathrm{AB} = \begin{pmatrix} \alpha & \beta \\ -\beta & \alpha \end{pmatrix} \begin{pmatrix} \gamma & \delta \\ -\delta & \gamma \end{pmatrix} = \begin{pmatrix} \alpha\,\gamma - \beta\,\delta & \alpha\,\delta + \beta\,\gamma \\ -\beta\,\gamma - \alpha\,\delta & -\beta\,\delta + \alpha\,\gamma \end{pmatrix}$

$\mathrm{BA} = \begin{pmatrix} \gamma & \delta \\ -\delta & \gamma \end{pmatrix} \begin{pmatrix} \alpha & \beta \\ -\beta & \alpha \end{pmatrix} = \begin{pmatrix} \alpha\,\gamma - \beta\,\delta & \beta\,\gamma + \alpha\,\delta \\ -\alpha\,\delta - \beta\,\gamma & -\beta\,\delta + \alpha\,\gamma \end{pmatrix} = \begin{pmatrix} \alpha\,\gamma - \beta\,\delta & \alpha\,\delta + \beta\,\gamma \\ -\beta\,\gamma - \alpha\,\delta & -\beta\,\delta + \alpha\,\gamma \end{pmatrix}$

On constate ainsi l'égalité $\mathrm{AB} = \mathrm{BA}$.