

### Exercise 1

$$M_r = \begin{pmatrix} \cos(35^\circ) & \sin(35^\circ) & 0 & 0 \\ -\sin(35^\circ) & \cos(35^\circ) & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}, M_s = \begin{pmatrix} 2 & 0 & 0 & 0 \\ 0 & 2 & 0 & 0 \\ 0 & 0 & 2 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$T = M_r \cdot M_s$$

### Exercise 2