

h) Scale RQR

$$S = \begin{pmatrix} s_x & 0 & 0 & 0 \\ 0 & s_y & 0 & 0 \\ 0 & 0 & s_z & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$(X' Y' Z') = (X Y Z 1) \begin{pmatrix} s_x & 0 & 0 & 0 \\ 0 & s_y & 0 & 0 \\ 0 & 0 & s_z & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$= (X \cdot s_x \quad Y \cdot s_y \quad Z \cdot s_z \quad 1) = 2x', y', z' \quad X=2$$

$$P(2, 0, -1)$$

$$P'(4, 0, -1)$$

$$Q(-1, 3, 4)$$

$$(-2, 3, 4)$$

$$R(3, -1, 2)$$

$$(6, -1, 2)$$

