h) Scale   RGR'

$$S = \begin{pmatrix} S_x & 0 & 0 & 0 \\ 0 & S_y & 0 & 0 \\ 0 & 0 & S_z & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$(x'\,y'\,z') = (x\,y\,z\,1)\begin{pmatrix} S_x & 0 & 0 & 0 \\ 0 & S_y & 0 & 0 \\ 0 & 0 & S_z & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}$$

$$= (x \cdot S_x \quad y \cdot S_y \quad z S \quad 1) = 2x,\ 4,\ z$$

$X = 2$

P (2, 0, -1)   Q(-1, 3, 4)   R(3, -1, 2)
P'(4 0 -1)   (-2) 3 4)   (6 -1 2))