## Checkpoint 1.

[cos(pi/4), 0, sin(pi/4) ½, cos(pi/4), -1/2 -½, sin(pi/4), ½]

## Checkpoint 2.

[ $\cos(\text{pi/4})$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ , 0,  $\cos(\text{pi/4})$ ,  $-\sin(\text{pi/4})$ - $\sin(\text{pi/4})$ ,  $\frac{1}{2}$ ,  $\frac{1}{2}$ ]

Checkpoint 3. [3 0 3]

## Checkpoint 4.

[1, 0, 0, 3 0, sqrt(2)/2, -sqrt(2)/2, 0 0, sqrt(2)/2, sqrt(2)/2, 2 0, 0, 0, 1]

## Checkpoint 5.







Checkpoint 6. They are all the same because the focal length control the zoom on the object.

Checkpoint 7.

