

What we want:



What we have:

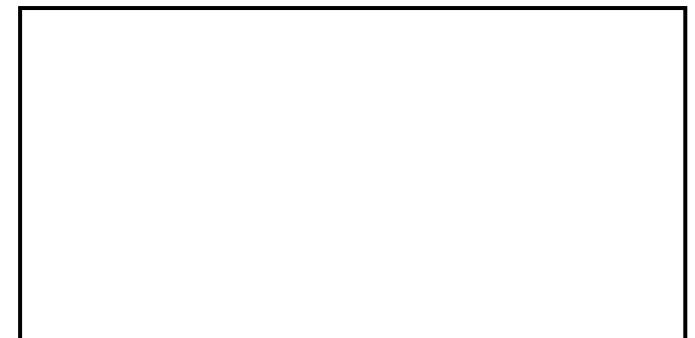
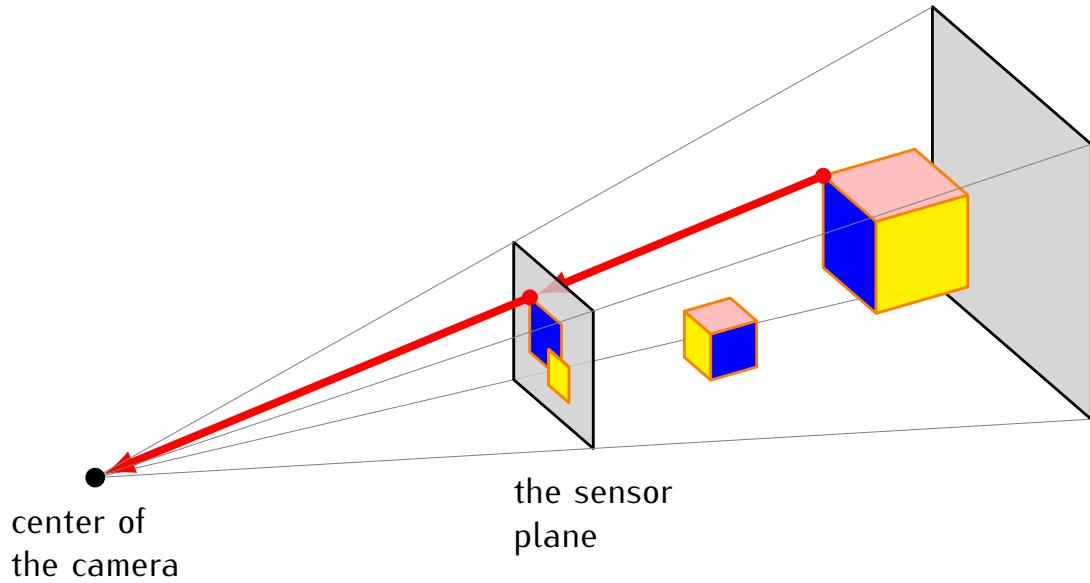
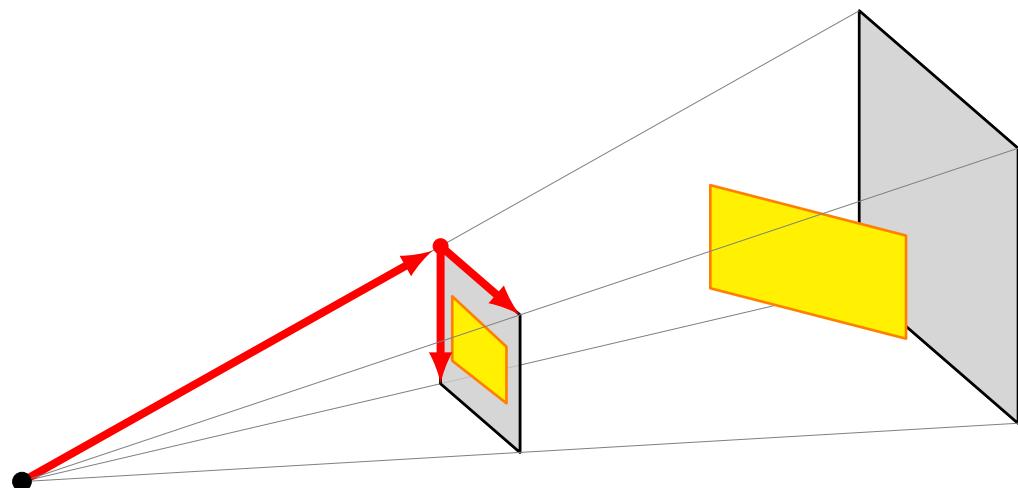
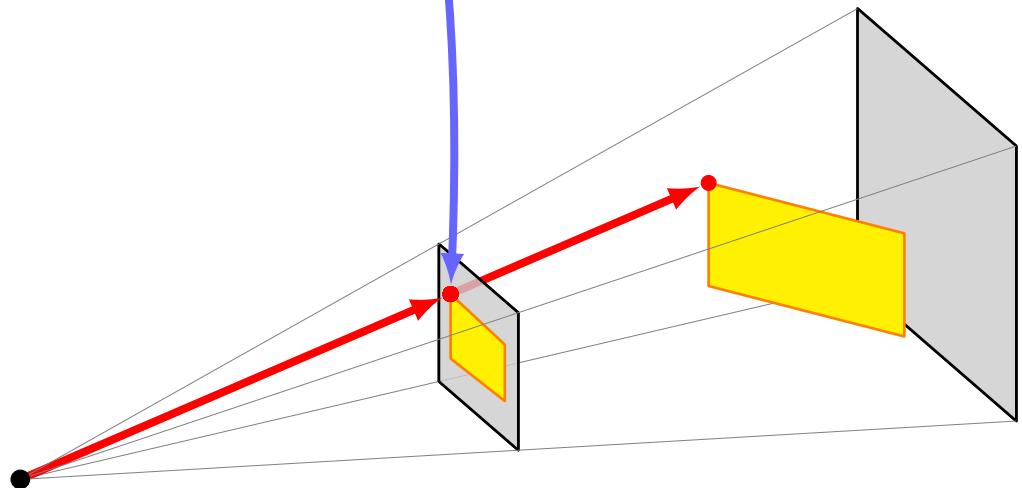


Image formation in a camera

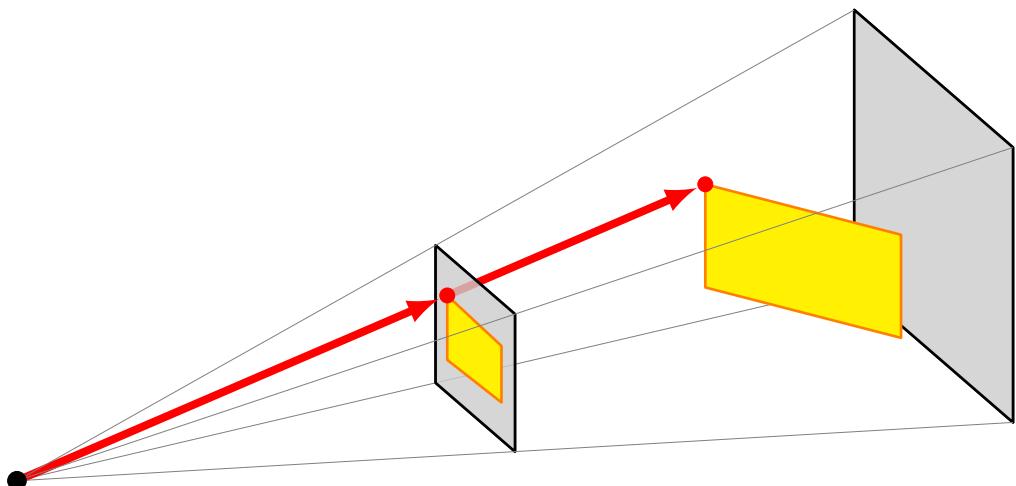
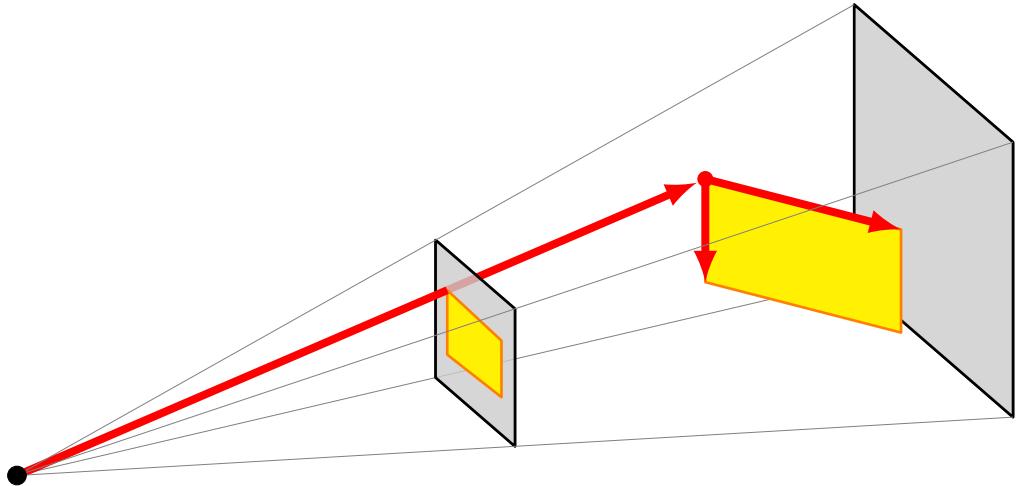


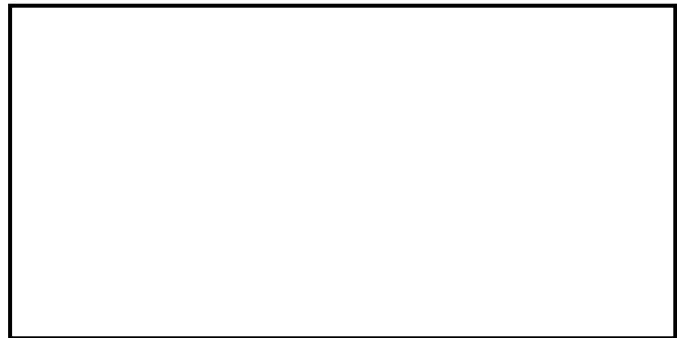
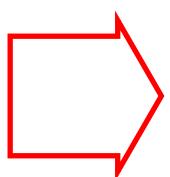
The camera coordinate system \mathcal{C}





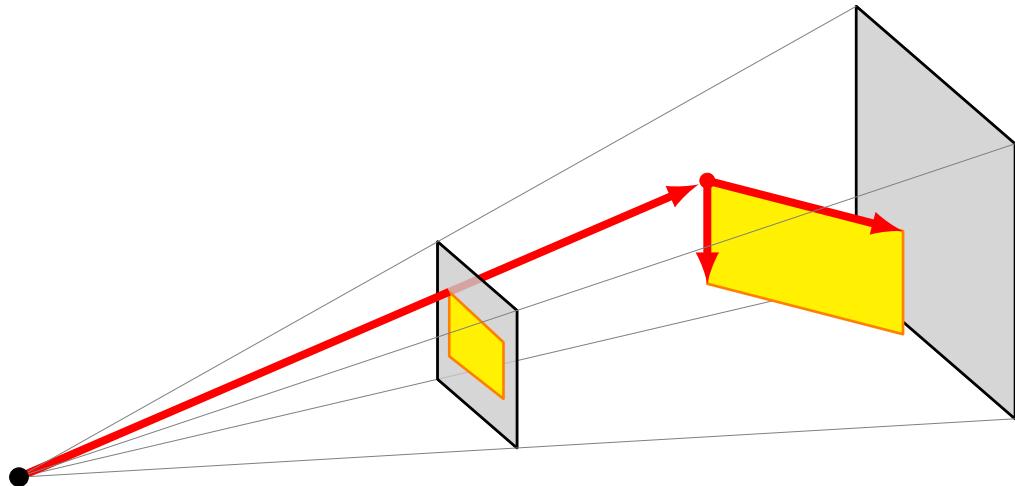
The mural coordinate system \mathcal{M}





From mural coordinates to camera coordinates

$$P_{C \leftarrow M} = [[\mathbf{m}_1]_C \quad [\mathbf{m}_2]_C \quad [\mathbf{m}_3]_C]$$



Problem: What are the numbers a , b , c ?