Step-1

If the 2 by 2 matrices $P_1 = \begin{pmatrix} 1 & 0 \\ 0 & 0 \end{pmatrix}$ and multiplying by the column matrices (x y) we have

$$\begin{pmatrix} 1 & 0 \\ 0 & 0 \end{pmatrix}\begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} x \\ 0 \end{pmatrix}$$

If the 2 by 2 matrices $P_2 = \begin{pmatrix} 0 & 0 \\ 0 & 1 \end{pmatrix}$ and multiplying by the column matrices (x y) we have

$$\begin{pmatrix} 0 & 0 \\ 0 & 1 \end{pmatrix}\begin{pmatrix} x \\ y \end{pmatrix} = \begin{pmatrix} 0 \\ y \end{pmatrix}$$

Step-2

If you multiply (5, 7) by P_1 then we get the column matrix (5, 0).

If you multiply (5, 7) by P_2 then we get the column matrix (0, 7).