



The diagram illustrates a block matrix structure. It consists of two light orange rectangular blocks. The larger block on the left contains the matrix $\begin{pmatrix} a & 0 \\ 0 & d \end{pmatrix}$. The smaller block on the right contains the matrix $\begin{pmatrix} 0 & b \\ c & 0 \end{pmatrix}$. A thick blue line runs vertically along the left edge of the large block, starting from a blue dot at the top-left corner. A thick orange line runs horizontally along the bottom edge of the large block, starting from the blue line and ending at an orange dot at the bottom-right corner of the large block. From this orange dot, a thick orange line runs vertically up to an orange dot at the top-left corner of the small block. From the bottom-right corner of the small block, a thick blue line runs horizontally to the right, ending at a blue dot.

$$\begin{pmatrix} a & 0 \\ 0 & d \end{pmatrix}$$

$$\begin{pmatrix} 0 & b \\ c & 0 \end{pmatrix}$$