

$$\det = \begin{array}{cc} & \begin{array}{c} u \qquad v \end{array} \\ \begin{array}{c} x \\ y \end{array} & \begin{array}{c} x' \\ y' \end{array} \end{array} = \dots$$

The diagram illustrates a determinant calculation. It features a 2x2 matrix with elements x , x' , y , and y' . A red loop connects x and y' , and a red arrow points from x to x' . The determinant is equated to an ellipsis.