

$$\det = \left| \begin{array}{cc} & \\ x & x' \\ & \\ y & y' \end{array} \right| = \dots$$

The diagram illustrates a determinant with four rows and two columns. The top row is empty. The second row contains  $x$  and  $x'$ . The third row is empty. The bottom row contains  $y$  and  $y'$ . A red arrow originates from  $x$  and points to  $x'$ , while a red loop connects  $x$  and  $y$  to  $x'$  and  $y'$ , indicating a swap between the second and third rows. The determinant is set equal to an ellipsis.