

일차변환과 영역 a_{21}
(Linear Transformation and Domain a_{21})

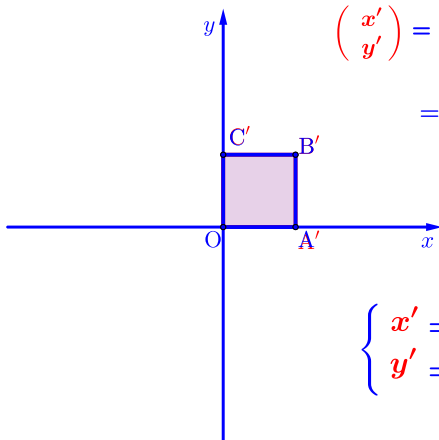
Linear Transformation and Domain a_{21}

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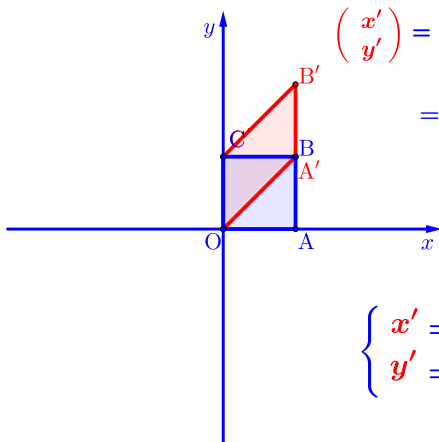


$$\begin{aligned} \begin{pmatrix} x' \\ y' \end{pmatrix} &= \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} \\ &= \begin{pmatrix} (1 \times x) + (0 \times y) \\ (0 \times x) + (1 \times y) \end{pmatrix} \end{aligned}$$

$$\begin{cases} x' = (1 \times x) + (0 \times y) \\ y' = (0 \times x) + (1 \times y) \end{cases}$$

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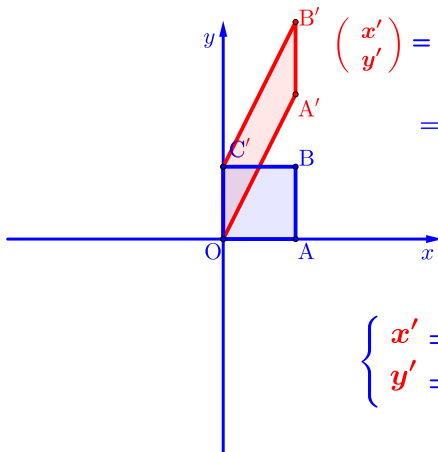


$$\begin{aligned} \begin{pmatrix} x' \\ y' \end{pmatrix} &= \begin{pmatrix} 1 & 0 \\ 1 & 1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} \\ &= \begin{pmatrix} (1 \times x) + (0 \times y) \\ (1 \times x) + (1 \times y) \end{pmatrix} \end{aligned}$$

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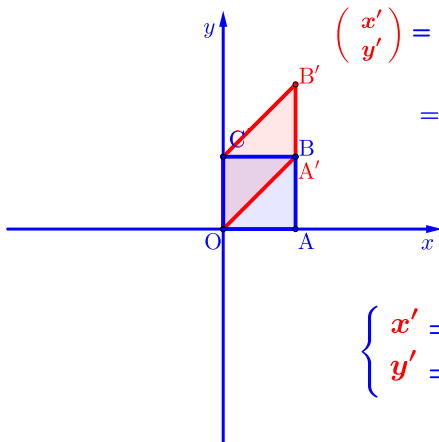


$$\begin{aligned} \begin{pmatrix} x' \\ y' \end{pmatrix} &= \begin{pmatrix} 1 & 0 \\ 2 & 1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} \\ &= \begin{pmatrix} (1 \times x) + (0 \times y) \\ (2 \times x) + (1 \times y) \end{pmatrix} \end{aligned}$$

$$\begin{cases} x' = (1 \times x) + (0 \times y) \\ y' = (2 \times x) + (1 \times y) \end{cases}$$

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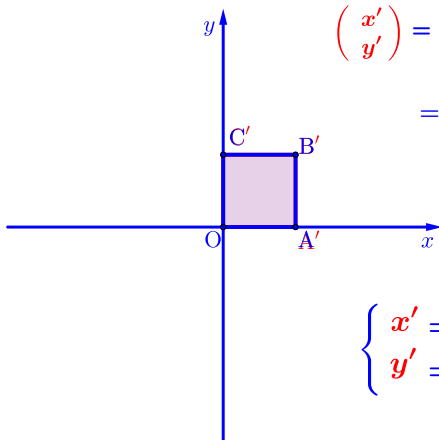


$$\begin{aligned} \begin{pmatrix} x' \\ y' \end{pmatrix} &= \begin{pmatrix} 1 & 0 \\ 1 & 1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} \\ &= \begin{pmatrix} (1 \times x) + (0 \times y) \\ (1 \times x) + (1 \times y) \end{pmatrix} \end{aligned}$$

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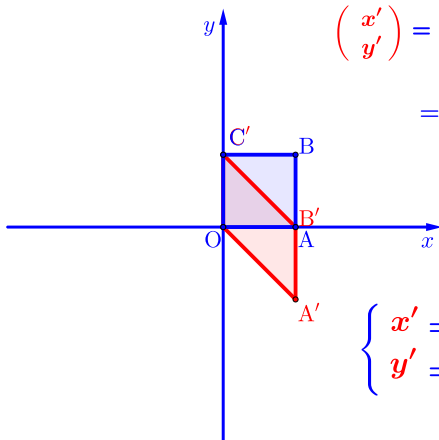


$$\begin{aligned} \begin{pmatrix} x' \\ y' \end{pmatrix} &= \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} \\ &= \begin{pmatrix} (1 \times x) + (0 \times y) \\ (0 \times x) + (1 \times y) \end{pmatrix} \end{aligned}$$

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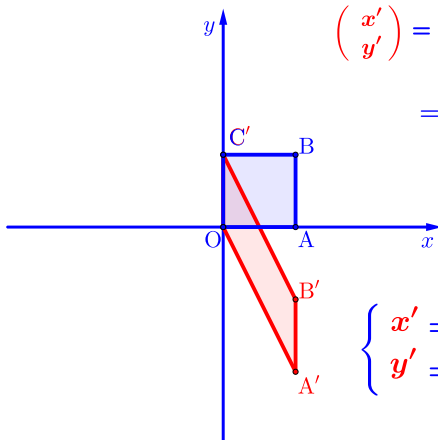


$$\begin{aligned} \begin{pmatrix} x' \\ y' \end{pmatrix} &= \begin{pmatrix} 1 & 0 \\ -1 & 1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} \\ &= \begin{pmatrix} (1 \times x) + (0 \times y) \\ (-1 \times x) + (1 \times y) \end{pmatrix} \end{aligned}$$

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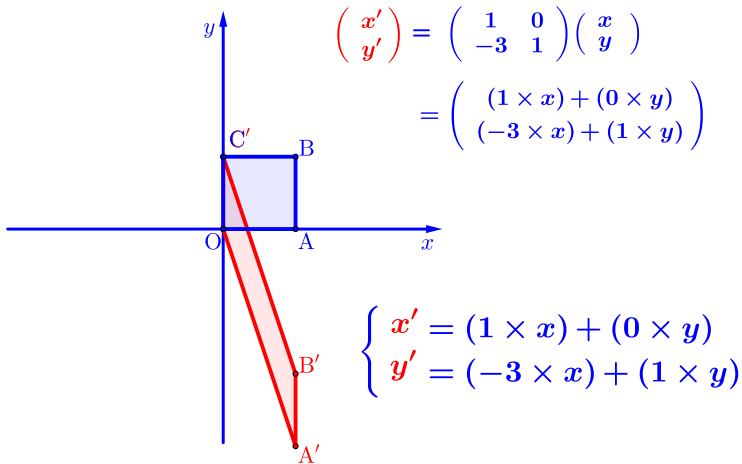


$$\begin{aligned} \begin{pmatrix} x' \\ y' \end{pmatrix} &= \begin{pmatrix} 1 & 0 \\ -2 & 1 \end{pmatrix} \begin{pmatrix} x \\ y \end{pmatrix} \\ &= \begin{pmatrix} (1 \times x) + (0 \times y) \\ (-2 \times x) + (1 \times y) \end{pmatrix} \end{aligned}$$

$$\begin{cases} x' = (1 \times x) + (0 \times y) \\ y' = (-2 \times x) + (1 \times y) \end{cases}$$

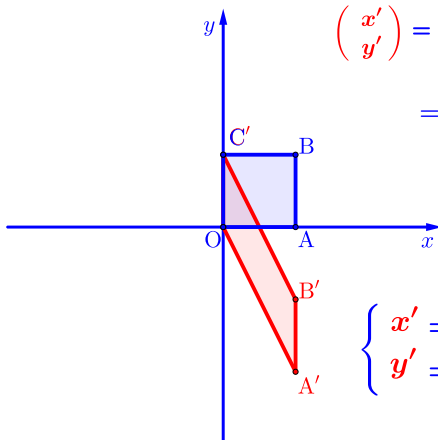
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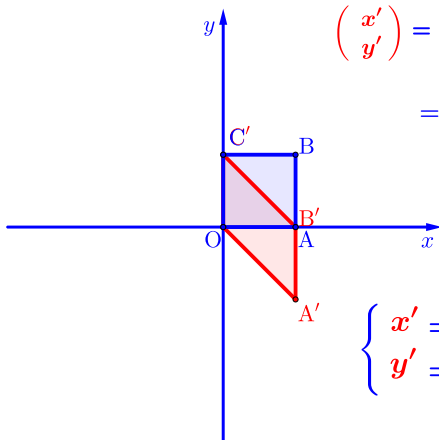


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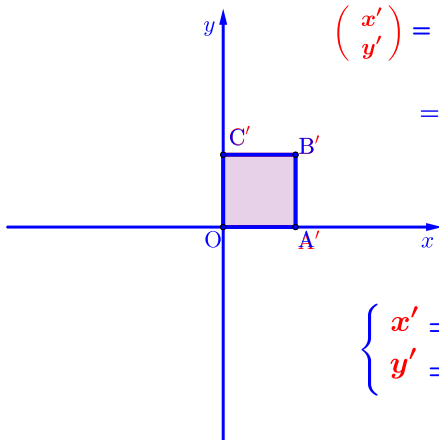


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Github:

<https://min7014.github.io/math20230410001.html>

Click or paste URL into the URL search bar,
and you can see a picture moving.