

ZAD

$$A \begin{pmatrix} x_A & y_A \\ -1 & -2 \end{pmatrix}$$

$$B \begin{pmatrix} x_B & y_B \\ 0 & -3 \end{pmatrix}$$

$$C \begin{pmatrix} x_C & y_C \\ 1 & -1 \end{pmatrix}$$

$$\vec{CA} - \vec{BC} + \vec{AB}$$

$$\vec{AB} = [x_B - x_A; y_B - y_A]$$

$$\vec{AB} = [0 + 1; -3 + 2]$$

$$\vec{AB} = [1; -1]$$

$$\vec{CA} = [x_A - x_C; y_A - y_C]$$

$$\vec{CA} = [-2 - 1; -2 + 1]$$

$$\vec{CA} = [-3; -1]$$

$$\vec{BC} = [x_C - x_B; y_C - y_B]$$

$$\vec{BC} = [1 - 0; -1 + 3]$$

$$\vec{BC} = [1; 2]$$

$$\vec{CA} - \vec{BC} + \vec{AB} = [-3; -1] - [1; 2] + [1; -1] =$$

$$= [-3 - 1 + 1; -1 - 2 - 1] = [-3; -4]$$