

For simplicity, we will write

$$x\hat{i} + y\hat{j} \equiv (x, y)$$

Consider the vectors

$$\vec{a} = (1, 2) \quad \vec{b} = (0, -3) \quad \vec{c} = (4, 0)$$

Find the following combinations using components and display the results geometrically.

$$\vec{a} + \vec{c}$$

$$\vec{b} - \vec{c}$$

$$2\vec{a} - \vec{b} + \vec{c}$$