

Eine Lösungsmöglichkeit wäre:

$$1.\text{Art: } \vec{a} = \overrightarrow{AB}, \vec{b} = \overrightarrow{AE}, \vec{c} = \overrightarrow{ED}, \vec{d} = \overrightarrow{DC}$$

$$\overrightarrow{BC} = -\vec{a} + \vec{b} + \vec{c} + \vec{d}$$

$$\overrightarrow{AC} = \vec{b} + \vec{c} + \vec{d}$$

$$\overrightarrow{AD} = \vec{b} + \vec{c}$$

$$\overrightarrow{BD} = -\vec{a} + \vec{b} + \vec{c}$$

$$\overrightarrow{BE} = -\vec{a} + \vec{b}$$

$$\overrightarrow{CE} = -\vec{c} - \vec{d}$$

$$2.\text{Art: } \vec{a} = \overrightarrow{AB}, \vec{b} = \overrightarrow{AC}, \vec{c} = \overrightarrow{AD}, \vec{d} = \overrightarrow{AE}$$

$$\overrightarrow{BC} = -\vec{a} + \vec{b}$$

$$\overrightarrow{CD} = -\vec{b} + \vec{c}$$

$$\overrightarrow{DE} = -\vec{c} + \vec{d}$$

$$\overrightarrow{BD} = -\vec{a} + \vec{c}$$

$$\overrightarrow{BE} = -\vec{a} + \vec{d}$$

$$\overrightarrow{CE} = -\vec{b} + \vec{d}$$