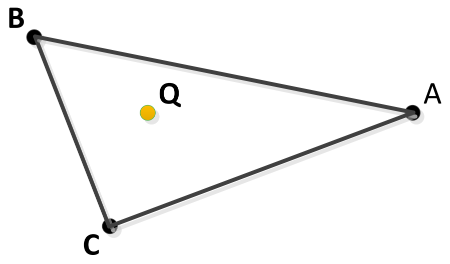
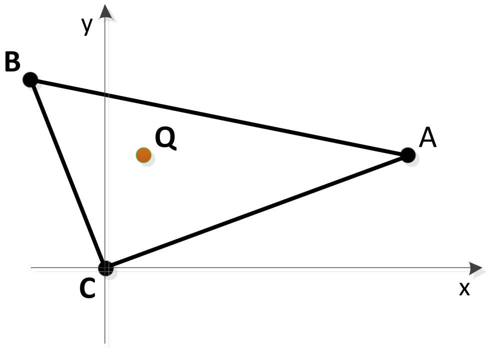
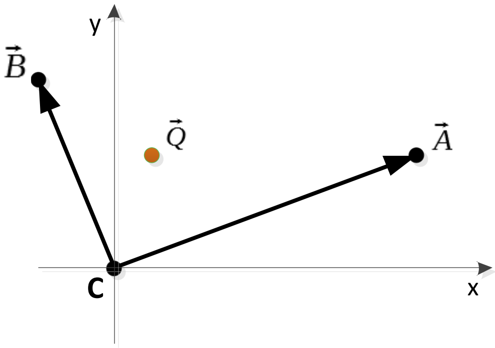
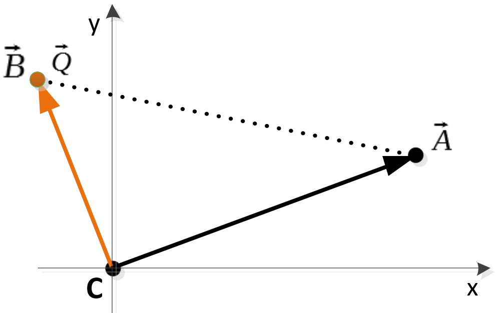
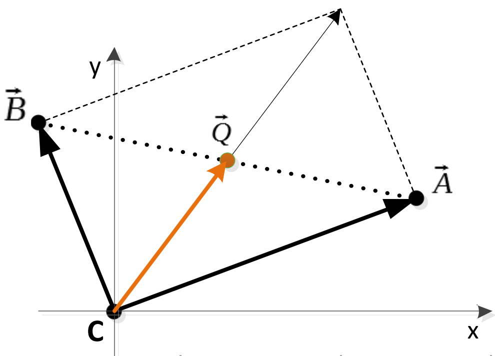




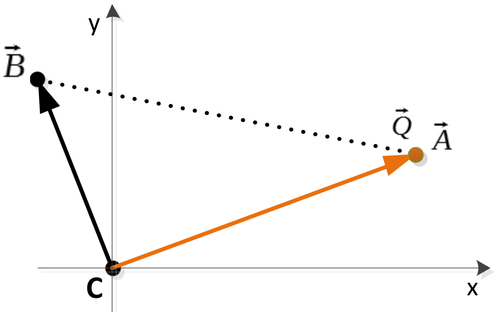




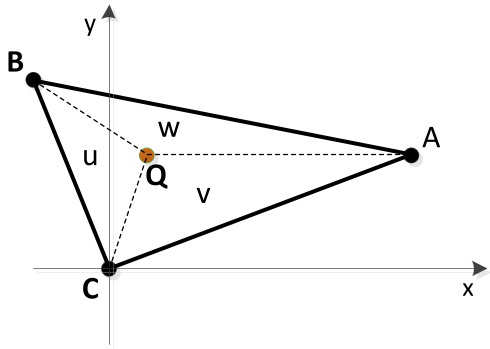
$$\vec{Q}=1\,\vec{B}+0\,\vec{A}$$

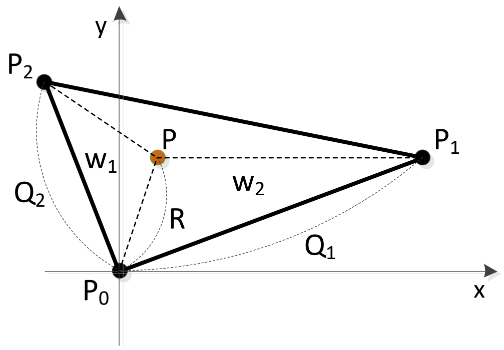


$$\vec{Q}=0.5\,\vec{B}+0.5\,\vec{A}$$



$$\vec{Q}=0\,\vec{B}+1\,\vec{A}$$





$$\mathbf{R} = \mathbf{P} - \mathbf{P}_0$$
$$\mathbf{Q}_1 = \mathbf{P}_1 - \mathbf{P}_0$$
$$\mathbf{Q}_2 = \mathbf{P}_2 - \mathbf{P}_0.$$

$$\mathbf{R} = w_1\mathbf{Q}_1 + w_2\mathbf{Q}_2.$$

$$\mathbf{R}\cdot\mathbf{Q}_1 = w_1 Q_1^2 + w_2(\mathbf{Q}_1\cdot\mathbf{Q}_2)$$
$$\mathbf{R}\cdot\mathbf{Q}_2 = w_1(\mathbf{Q}_1\cdot\mathbf{Q}_2) + w_2 Q_2^2,$$

$$\begin{bmatrix} Q_1^2 & \mathbf{Q}_1\cdot\mathbf{Q}_2 \\ \mathbf{Q}_1\cdot\mathbf{Q}_2 & Q_2^2 \end{bmatrix}\begin{bmatrix} w_1 \\ w_2 \end{bmatrix} = \begin{bmatrix} \mathbf{R}\cdot\mathbf{Q}_1 \\ \mathbf{R}\cdot\mathbf{Q}_2 \end{bmatrix}.$$

$$\begin{bmatrix} w_1 \\ w_2 \end{bmatrix} = \begin{bmatrix} Q_1^2 & \mathbf{Q}_1\cdot\mathbf{Q}_2 \\ \mathbf{Q}_1\cdot\mathbf{Q}_2 & Q_2^2 \end{bmatrix}^{-1}\begin{bmatrix} \mathbf{R}\cdot\mathbf{Q}_1 \\ \mathbf{R}\cdot\mathbf{Q}_2 \end{bmatrix}$$
$$= \frac{1}{Q_1^2 Q_2^2 - (\mathbf{Q}_1\cdot\mathbf{Q}_2)^2}\begin{bmatrix} Q_2^2 & -\mathbf{Q}_1\cdot\mathbf{Q}_2 \\ -\mathbf{Q}_1\cdot\mathbf{Q}_2 & Q_1^2 \end{bmatrix}\begin{bmatrix} \mathbf{R}\cdot\mathbf{Q}_1 \\ \mathbf{R}\cdot\mathbf{Q}_2 \end{bmatrix}$$