$$\vec{a} = l \cdot \vec{d} + k \cdot \vec{c}$$

$$\begin{pmatrix} -1 \\ 1 \end{pmatrix} = l \begin{pmatrix} 1 \\ 11 \end{pmatrix} + k \cdot \begin{pmatrix} 2 \\ -6 \end{pmatrix}$$

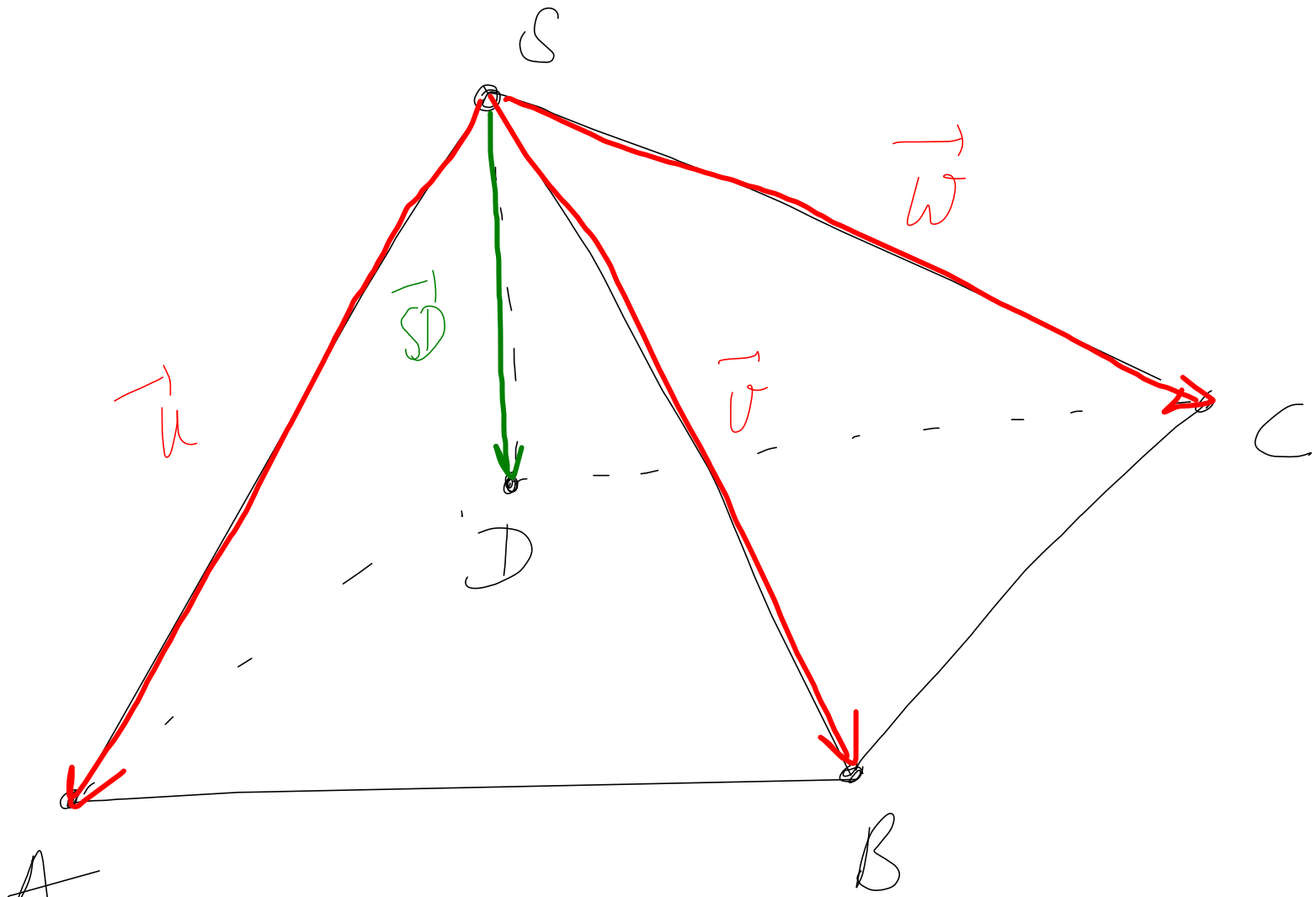
$$-1 = l + 2k$$

$$1 = 11l - 6k$$

$$L_2 \leftarrow L_2 + 3L_1$$

$$-1 = l + 2k$$

$$-1 = 14l$$



Chasles

$$\vec{SD} = \vec{SA} + \vec{AD}$$

$$= \vec{u} + \vec{AD} = \vec{u} + \vec{BC}$$

$$= \vec{u} - \vec{v} + \vec{w}$$

$$-1 = 2x + y$$

$$1 = -6x + 11y$$

$$L_2 \leftarrow L_2 + 3L_1$$

$$-1 = 2x + y$$

$$-2 = 0 + 14y \qquad y = -\frac{2}{14} = -\frac{1}{7}$$

$$x = \frac{1}{2}\left(-1 - y\right) = \frac{1}{2}\left(-\frac{6}{7}\right)$$

$$= -\frac{3}{7}$$

$$\begin{cases} l + 2k = -1 \\ 11l - 6k = 1 \end{cases} \quad \begin{matrix} \\ 3 \\ 1 \end{matrix}$$

$$L_2 \leftarrow L_2 + 3L_1$$

$$\begin{cases} l + 2k = -1 \\ 14l + 0k = -3 + 1 \end{cases}$$

$$\begin{cases} l + 2k = -1 \\ 14l = -2 \end{cases}$$

$$l = -\frac{2}{14} = -\frac{1}{7}$$

$$-1/2 = \frac{-1}{2} = \frac{1}{-2} = -0,5$$

$$\neq -1,5$$

$$-1 - \frac{1}{2} = -\frac{3}{2} = -1,5$$

$$3\begin{pmatrix} 1 \\ 3 \end{pmatrix} + 2\begin{pmatrix} -2 \\ -1 \end{pmatrix} =$$

$$\begin{pmatrix} 3 \\ 9 \end{pmatrix} + \begin{pmatrix} -4 \\ -2 \end{pmatrix} = \begin{pmatrix} 3-4 \\ 9-2 \end{pmatrix} = \begin{pmatrix} -1 \\ 7 \end{pmatrix}$$