$$l = \left(\|b-c\|_2^2, \|a-c\|_2^2, \|a-b\|_2^2\right)$$

$$ba = \left(l_1\left(l_2+l_3-l_1\right), l_2\left(l_3+l_1-l_2\right), l_3\left(l_1+l_2-l_3\right)\right)$$

$$cc = \frac{1}{ba_1+ba_2+ba_3}\left(ba_1 a + ba_2 b + ba_3 c\right)$$

where

$$a \in \mathbb{R}^3$$

$$b \in \mathbb{R}^3$$

$$c \in \mathbb{R}^3$$