

Mutassuk meg, hogy ha

$$ax^2 + by^2 + cz^2 + 2dyz + 2ezx + 2fxy = 0,$$

akkor

$$\begin{aligned} & (dyz + ezx + fxy)^2 - bcy^2z^2 - caz^2x^2 - abx^2y^2 \equiv \\ & \equiv \frac{1}{4}(x\sqrt{a} + y\sqrt{b} + z\sqrt{c})(x\sqrt{a} - y\sqrt{b} + z\sqrt{c})(x\sqrt{a} + y\sqrt{b} - z\sqrt{c})(x\sqrt{a} - y\sqrt{b} - z\sqrt{c}). \end{aligned}$$