

$$\begin{aligned}
(ay - bx)^2 + (bz - cy)^2 + (cx - az)^2 + (ax + by + cz)^2 &= \\
= a^2y^2 + b^2x^2 + b^2z^2 + c^2y^2 + c^2x^2 + a^2z^2 - 2abxy - \\
- 2bcyz - 2acxz + a^2x^2 + b^2y^2 + c^2z^2 + 2abxy + 2bcyz + \\
2acxz &= a^2(x^2 + y^2 + z^2) + b^2(x^2 + y^2 + z^2) + \\
+ c^2(x^2 + y^2 + z^2) &= (a^2 + b^2 + c^2)(x^2 + y^2 + z^2).
\end{aligned}$$

(Paunz Rezső. Pécs.)

Megoldások száma: 31.