

$$\begin{aligned} \frac{\sin \alpha + \sin 3\alpha - \sin 5\alpha}{\cos \alpha - \cos 3\alpha - \cos 5\alpha} &= \frac{\sin \alpha - [\sin 5\alpha - \sin 3\alpha]}{\cos \alpha - [\cos 5\alpha + \cos 3\alpha]} = \\ &= \frac{\sin \alpha - [2 \cos 4\alpha \cdot \sin \alpha]}{\cos \alpha - [2 \cos 4\alpha \cdot \cos \alpha]} = \frac{\sin \alpha [1 - 2 \cos 4\alpha]}{\cos \alpha [1 - 2 \cos 4\alpha]} = \operatorname{tg} \alpha. \end{aligned}$$

(Riesz Kornél, Budapest.)

Megoldások száma: 41.