

$$\begin{aligned}
\frac{\sin A + \sin B - \sin C}{\sin A + \sin B + \sin C} &= \frac{2 \sin \frac{A+B}{2} \cos \frac{A-B}{2} - 2 \sin \frac{A+B}{2} \cos \frac{A+B}{2}}{2 \sin \frac{A+B}{2} \cos \frac{A-B}{2} + 2 \sin \frac{A+B}{2} \cos \frac{A+B}{2}} = \\
&= \frac{\sin \frac{A+B}{2} \left(\cos \frac{A-B}{2} - \cos \frac{A+B}{2} \right)}{\sin \frac{A+B}{2} \left(\cos \frac{A-B}{2} + \cos \frac{A+B}{2} \right)} = \frac{\sin \frac{A}{2} \sin \frac{B}{2}}{\cos \frac{A}{2} \cos \frac{B}{2}} = \operatorname{tg} \frac{A}{2} \operatorname{tg} \frac{B}{2}.
\end{aligned}$$

(Sasvári Géza, Pécs.)

Megoldások száma: 52.