

$$\begin{aligned}\sin^2 30^\circ + \operatorname{tg} 30^\circ \operatorname{tg} 120^\circ + \sin^2 60^\circ &= \sin^2 30^\circ + \cos^2 30^\circ - \operatorname{tg} 30^\circ \operatorname{tg} 60^\circ = \\ &= 1 - \operatorname{tg} 30^\circ \operatorname{ctg} 30^\circ = 1 - 1 = 0.\end{aligned}$$

(Steinitz Károly, Pécs.)