

Van-e olyan n pozitív egész szám, amelyre

$$\left(\frac{1}{\sqrt{1}+\sqrt{2}}+\frac{1}{\sqrt{2}+\sqrt{3}}+\dots+\frac{1}{\sqrt{n^2-1}+\sqrt{n^2}}\right)\cdot\left(\frac{1}{\sqrt{2}}+\frac{1}{\sqrt{2}+\sqrt{4}}+\dots+\frac{1}{\sqrt{n^2-2}+\sqrt{n^2}}\right)=45.$$