Problema săptămânii 126

Dacă $a, b, c, d \in [0, 1]$, aflaţi valoarea maximă a expresiei

$$|(a - b)(a - c)(a - d)(b - c)(b - d)(c - d)|.$$

Problem of the week no. 126

Find the maximum value of the expression $|(a-b)(a-c)(a-d)(b-c)(b-d)(c-d)|$ when $a, b, c, d \in [0, 1]$.