

Problema săptămânii 113

Determinați numerele reale nenegative a, b, c, d care satisfac simultan relațiile:

$$a + b + c + d = 4 \text{ și}$$

$$\frac{1}{1 + a + ab + abc} + \frac{1}{1 + b + bc + bcd} + \frac{1}{1 + c + cd + cda} + \frac{1}{1 + d + da + dab} = 1.$$

Problem of the week no. 113

Determine the non-negative real numbers a, b, c, d that satisfy: $a + b + c + d = 4$ and

$$\frac{1}{1 + a + ab + abc} + \frac{1}{1 + b + bc + bcd} + \frac{1}{1 + c + cd + cda} + \frac{1}{1 + d + da + dab} = 1.$$