Laboratorul 3

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1

C = evenimentul in care are loc un cutremur $P(C) = 0.0005$
I = evenimentul in care are loc un incendiu $P(I) = 0.01$

A = evenimentul in care se declanseaza alarma $P(A) = 0.0001 \Rightarrow P(\neg A) = 0.9999$
$P(A|C) = 0.02$
$P(A|I) = 0.95 \Rightarrow P(\neg A|I) = 0.05$

$P(C|A) = \frac{P(A|C) \cdot P(C)}{P(A)} = \frac{0.02 \cdot 0.0005}{0.0001} = 0.1$

2

$P(I|\neg A) = \frac{P(\neg A|I) \cdot P(I)}{P(\neg A)} = \frac{0.05 \cdot 0.01}{0.9999} = 0.005$