

Olimpiada de matematică

Bistrita- Etapa județeană- 12.03.2011

clasa a IV-a

Problema 1

$$450 - [1550 - 10 \times (x - 12)] : 4 = 75 \dots\dots\dots 1p$$

$$[1550 - 10 \times (x - 12)] : 4 = 375 \dots\dots\dots 1p$$

$$1550 - 10 \times (x - 12) = 375 \times 4 \dots\dots\dots 1p$$

$$10 \times (x - 12) = 1550 - 1500 \dots\dots\dots 1p$$

$$x - 12 = 50 : 10 \dots\dots\dots 1p$$

$$x - 12 = 5 \dots\dots\dots 1p$$

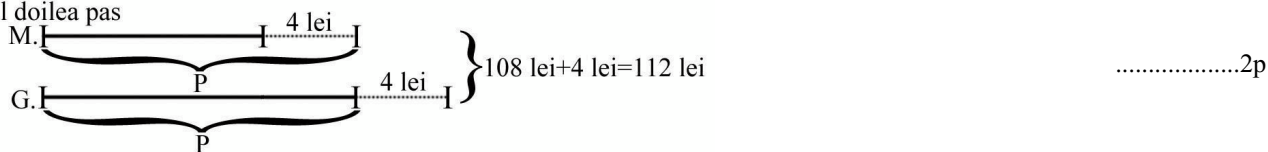
$$x = 17 \dots\dots\dots 1p$$

Problema 2

Primul pas



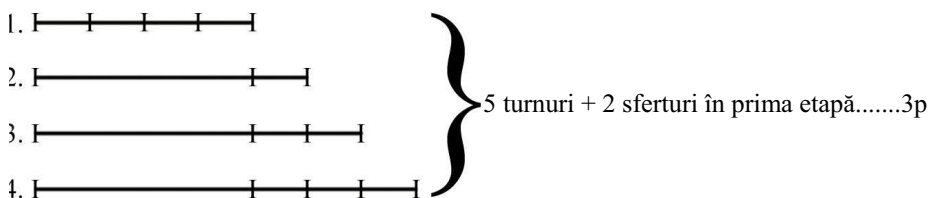
Al doilea pas



$$\left. \begin{array}{l} 2P + 4 = 112 \\ P = 54 \end{array} \right\} \dots\dots\dots 2p$$

$$\left. \begin{array}{l} M = 54 - 4 = 50 \text{ lei} \\ G = 54 + 4 = 58 \text{ lei} \end{array} \right\} \dots\dots\dots 1p$$

Problema 3



La fel și în etapa a II-a până la etapa a IV-a când vor avea:

$$5 \times 4 + 8 \text{ sferturi} = 20 + 2 = 22 \text{ tururi} \dots\dots\dots 2p$$

$$\text{Concurentul cu numărul 4 va face } 4 \text{ tururi} + 4 \times \frac{3}{4} \text{ tururi} = 7 \text{ tururi} \dots\dots\dots 2p$$