

Barem de evaluare
Test de antrenament nr. 1
Clasa a V-a
09.03.2026

Subiectul 1

Se dau:

$$x=2^{1101} ; y=2 \cdot 3^{660} ; z=2 \cdot 7^{440} \quad (1p)$$

$$x=2 \cdot (2^{10})^{110} = 2 \cdot 1024^{110} ; y=2 \cdot (3^6)^{110} = 2 \cdot 729^{110} ; z=2 \cdot (7^4)^{110} = 2 \cdot 2401^{110}$$

(1p)

$$y < x < z \quad (1p)$$

Subiectul 2

$$699 < \overline{7ab} < 800 \Rightarrow 699 < 6 \cdot (2x + 5)^2 < 800 \quad (1p)$$

$$(2x + 5)^2 = 121 ; x = 3 \quad (1p)$$

$$6 \cdot 11^2 = \overline{7ab} ; \overline{7ab} = 726 ; a = 2, b = 6 \quad (1p)$$

Subiectul 3

$$n = 9q + r, r < 9 ; n = 17r + q, q < 17 \quad (1p)$$

$$q = 2r ; \text{convine } r \in \{1, 2, 3, 4, 5, 6, 7, 8\} \quad (1p)$$

$$n \in \{19, 38, 57, 76, 95, 114, 133, 152\} \quad (1p)$$