

# COLEGIUL NAȚIONAL „OCTAVIAN GOGA” SIBIU

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## CONCURSUL INTERJUDEȚEAN „GOGA JUNIOR” EDIȚIA a XVIII-a – 28 MARTIE 2026 BAREM DE CORECTARE MATEMATICĂ – CLASA a VI-a

### SUBIECTUL I (30 puncte)

a) (15p)  $15\% \cdot 1600 \text{ lei} = 240 \text{ lei}$ .....5p

$1600 - 240 = 1360 \text{ lei}$ .....2,5p

$15\% \cdot 1360 = 204 \text{ lei}$ .....5p

$1360 + 204 = 1564 \text{ lei}$ .....2,5p

b) (15p)  $1600 - x\% \cdot 1600 = 1564$ .....3p

$x\% \cdot 1600 = 36$ .....3p

$x\% = 0,0225$ .....4p

$x = 2,25\%$ .....5p

### SUBIECTUL al II-lea (30 puncte)

$\frac{a}{226} = \frac{b}{500} = \frac{c}{600}$ .....5p

$c \cdot 2 = d \cdot 3 = e \cdot 4 \mid : 12 \Rightarrow \frac{c}{6} = \frac{d}{4} = \frac{e}{3}$ .....10p

$\frac{a}{226} = \frac{b}{500} = \frac{c}{600} = \frac{d}{400} = \frac{e}{300} = \frac{a+b+c+d+e}{226+500+600+400+300} = 1$ .....10p

$a = 226; b = 500; c = 600; d = 400; e = 300$ .....5p

### SUBIECTUL al III-lea (30 puncte)

a)(15p)  $OM - \text{bis} \sphericalangle AOB \Rightarrow \sphericalangle AOM = \sphericalangle BOM$ .....3p

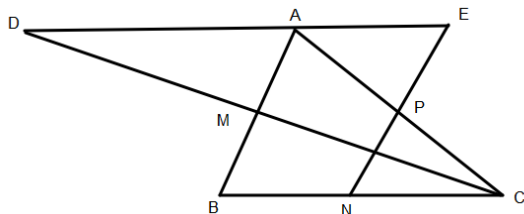
$ON - \text{bis} \sphericalangle COB \Rightarrow \sphericalangle BON = \sphericalangle CON$ .....3p

$OM \perp ON \Rightarrow \sphericalangle AOB + \sphericalangle BOC = 180^\circ$ .....3p

$\sphericalangle BOC = 3 \cdot \sphericalangle AOB$ .....3p

$4 \cdot \sphericalangle AOB = 180^\circ \Rightarrow \sphericalangle AOB = 45^\circ$  și  $\sphericalangle BOC = 135^\circ$ .....3p

b)(15p)



$\triangle APE \equiv \triangle CPN$  (L. U. L.)  $\Rightarrow AE = NC$ .....5p

$\triangle DMA \equiv \triangle CMB$  (L. U. L.)  $\Rightarrow AD = BC$ .....5p

$BC = 2 \cdot NC \Rightarrow AD = 2 \cdot AE$ .....5p