BAREM DE EVALUARE ŞI DE NOTARE

Varianta 139 Prof. Popa Camelia Sanda

SUBIECTUL I		(30 de puncte)
1.	1	5p
2.	210	5p
3.	180	5p
4.	8	5p
5.	138	5p
6.	250	5p
SUBIECTUL II		(30 de puncte)
1.	Desenează prisma Notează prisma	4p 1p
2.	$a-b=120$ $a=5c_1; b=3c_2$ $c_1=20+c_2$ $5c_1-3c_2=120$ $a=150; b=30$	1p 1p 1p 1p 1p
3.	$x-nr.adulti, y-nr.copii \Rightarrow x+y=630$ $25x+10y=9525$ $x=215; y=415$	1p 1p 3p
4.	a) $x^2+6x+9=(x+3)^2$	2p

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	$E_1(x)=\dfrac{1}{x+3}$	3p
	b) $x^2-9=(x+3)(x-3)$ $\dfrac{1}{2}E_2(x)=\dfrac{x}{x+3}$ $x\in\{-6;-4;-2\}$	1p 2p 2p
5	$f(a^2)=3a+1$ $2a^2-3a-2=0$ $a\in\left\{2;-\dfrac{1}{2}\right\}$	1p 2p 2p
	SUBIECTUL III	(30 de puncte)
1.	a) $V=A_b\cdot h$ $V=2m^3$	2p 3p
	b) $VM\perp AD; VN\perp BC\Rightarrow \triangle VMN$ echilateral $\Rightarrow VM=2m$ $A_l=\dfrac{P_b\cdot a_p}{2}$ $A_l=8m^2$	2p 1p 2p
	c) $V_{rezervor}=V_{piramida}+V_{prisma}=(\dfrac{4\sqrt{3}}{3}+2)m^3=(\dfrac{400\sqrt{3}}{3}+2000)litri$ $V_{rezervor}:20=\dfrac{200\sqrt{3}}{3}+100\simeq 215,45\min$	1p 2p 2p

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2.	a) $\frac{A_{\triangle AEF}}{A_{\triangle ABC}} = \left(\frac{x}{400}\right)^2$ $A_{\triangle AEF} = \frac{3x^2}{8}$	3p 2p
	b) $A_{\triangle AEF} = \frac{1}{3}\left(A_{\triangle ABC} - A_{\triangle AEF}\right)$ $x = 200m$	1p 4p
	c) $A_{\triangle AEF} = 15000m^2 = 1,5ha$ $m_{grau} = 22,5kg$ $pret_{grau} = 135lei$ $pret_{final} = 108lei$	2p 1p 1p 1p

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