

FI DE LUCRU

Integrale prin p r i

CLASA a XII a C

<i>Subiectul I</i>	<i>Subiectul II</i>
<ol style="list-style-type: none"> 1. $\int (x+1)\ln x \, dx, x > 0$ 2. $\int x^2 \ln x \, dx, x > 0$ 3. $\int \ln^2 x \, dx, x > 0$ 4. $\int x^2 \ln^2 x \, dx, x > 0$ 5. $\int (x^2 - 3x)\ln x \, dx, x > 0$ 6. $\int \ln(x^2 + 1) \, dx, x \in \mathbb{R}$ 7. $\int \frac{\ln x}{x^2} \, dx, x > 0$ 8. $\int \sqrt{x} \ln x \, dx, x > 0$ 	<ol style="list-style-type: none"> 1. $\int (x^2 - 2x - 1)e^x \, dx, x \in \mathbb{R}$ 2. $\int x e^{-x} \, dx, x \in \mathbb{R}$ 3. $\int x^2 e^{2x} \, dx, x \in \mathbb{R}$ 4. $\int x^3 \, dx, x \in \mathbb{R}$ 5. $\int x^2 5e^x \, dx, x \in \mathbb{R}$ 6. $\int (x^3 + 5x^2 - 2)e^{2x} \, dx$ 7. $\int (x^2 + 2x)e^{3x} \, dx, x \in \mathbb{R}$ 8. $\int x^2 e^{-\frac{x}{2}} \, dx, x \in \mathbb{R}$
<i>Subiectul III</i>	<i>Subiectul IV</i>
<ol style="list-style-type: none"> 1. $\int x \arctg x \, dx, x \in \mathbb{R}$ 2. $\int x \arcsin x \, dx, x \in (-1, 1): x \in [-1, 1]$ 3. $\int \arccos x \, dx, x \in (-1, 1): x \in [-1, 1]$ 4. $\int \arctg x \, dx, x \in \mathbb{R}$ 5. $\int (\arcsin x)^2 \, dx, x \in (-1, 1)$ 	<ol style="list-style-type: none"> 1. $\int e^x \sin x \, dx, x \in \mathbb{R}$ 2. $\int e^x \cos x \, dx, x \in \mathbb{R}$ 3. $\int 2^x \sin x \, dx, x \in \mathbb{R}$ 4. $\int e^{2x} \sin 3x \, dx, x \in \mathbb{R}$ 5. $\int e^x \sin x^2 \, dx, x \in \mathbb{R}$ 6. $\int e^{2x} \cos^2 x \, dx, x \in \mathbb{R}$
<i>Subiectul V</i>	<i>Subiectul VI</i>
<ol style="list-style-type: none"> 1. $\int x^2 \cos x \, dx, x \in \mathbb{R}$ 2. $\int \sin^2 x \, dx, x \in \mathbb{R}$ 3. $\int x \cos x \, dx, x \in \mathbb{R}$ 4. $\int x \sin 2x \, dx, x \in \mathbb{R}$ 5. $\int x \sin^2 x \, dx, x \in \mathbb{R}$ 6. $\int x^2 \cos 2x \, dx, x \in \mathbb{R}$ 7. $\int (x^2 - 3x + 5)\sin 2x \, dx, x \in \mathbb{R}$ 8. $\int x^3 \sin x \, dx, x \in \mathbb{R}$ 	<ol style="list-style-type: none"> 1. $\int x\sqrt{x^2 + 49} \, dx, x \in \mathbb{R}$ 2. $\int \sqrt{x^2 - 25} \, dx, x \in (5, \infty)$ si apoi $x \in [5, \infty)$ 3. $\int \sqrt{16 - x^2} \, dx, x \in (-4, 4)$ si apoi $x \in [-4, 4]$ 4. $\int x \sqrt{x^2 - 25} \, dx, x \in (5, \infty)$ 5. $\int x^2 \sqrt{x^2 - 25} \, dx, x \in (5, \infty)$ 6. $\int x\sqrt{x^2 + 1} \, dx, x \in \mathbb{R}$

Aveti acum si un AJUTOR ONLINE pe www.mateinfo.ro/forum unde veti fi ajutat de un profesor sau elev . Scopul acestui proiect este de a va ajuta, in primul rand, intre voi cu mici idei la solutionarea unor probleme mai dificile (in afara programului scolar) unde profesorul sa intervina doar atunci cand este cazul.