

Profesor Blaga Mirela-Gabriela

Test
Clasa a XII-a

- Toate subiectele sunt obligatorii. La toate problemele se cer rezolvări complete.
- Din oficiu se acordă 1 punct.

Calculați integralele:

- 1p 1. $\int \frac{x+2}{x^2+4x+5} dx, x \in \mathbb{R}$
- 1p 2. $\int (x+1) \cdot \cos x dx, x \in \mathbb{R}$
- 1p 3. $\int \frac{x-1}{\sqrt{1+x^2}} dx, x \in \mathbb{R}$
- 1p 4. $\int \frac{dx}{x^2-4x+4}, x \in (3, \infty)$
- 1p 5. $\int \ln^2 x dx, x \in (0, \infty)$
- 1p 6. $\int x \cdot (3x^2+2)^{14} dx, x \in \mathbb{R}$
- 1p 7. $\int x^2 \cdot 3^x dx, x \in \mathbb{R}$
- 1p 8. $\int \sqrt{1+x^2} dx, x \in \mathbb{R}$
- 1p 9. $\int \frac{(x+1)(x^2+2x-2)}{\sqrt{1-(x^2+2x-2)^2}} dx, x \in \left(\frac{1}{2}, 1\right)$