

Profesor Blaga Mirela-Gabriela

Test

Clasa a XII-a

- La toate exercițiile se cer rezolvări complete.

1p Calculați integralele:

1p 1) $\int_0^2 (x^2 + x + 1) dx$

1p 2) $\int_0^{\frac{1}{2}} \frac{1}{\sqrt{1-x^2}} dx$

1p 3) $\int_{-1}^1 \frac{1}{x^2 - 4x + 4} dx$

1p 4) $\int_0^2 \frac{x^2}{x^2 + 4} dx$

1p 5) $\int_1^4 \frac{1}{(\sqrt{x} + 4)\sqrt{x}} dx$

1p 6) $\int_0^1 x^2 \cdot e^x dx$

1p 7) $\int_0^{\frac{1}{2}} \sqrt{\frac{1-x}{1+x}} dx$

1p 8) $\int_0^{\frac{\pi}{4}} \frac{\cos x - \sin x}{\sin x + \cos x} dx$

1p 9) $\int_0^{\pi} \cos x \cdot e^x dx$