Babeș-Bolyai University, Faculty of Mathematics and Computer Science

Bachelor, Computer Science, Groups 911-917, Academic Year 2019-2020

Mathematical Analysis
Seminar 6

Compute

1. $\int \mathrm{tg}(x)\mathrm{d}x, \quad \int \ln(x)\mathrm{d}x, \quad \int \frac{x+2}{x^2+1}\mathrm{d}x$

2. $\int \frac{\mathrm{d}x}{x^2-1}, \quad \int \frac{\mathrm{d}x}{(x^2+1)(x-2)}, \quad \int \frac{\mathrm{d}x}{(x^2+4)^2}$

3. $\int (\sin(x))^4\,\mathrm{d}x, \quad \int (\cos(x))^5\,\mathrm{d}x$

4. $\int \frac{\mathrm{d}x}{\sqrt[4]{1+x^4}}$ (Chebyshev)

5. $\int \frac{\mathrm{d}x}{5+4\sin(x)}$