

Matematička analiza 1 - 20. auditorna vježba - 22.12.2023.

Zadatak 1 Izračunajte:

(a) $\int \frac{dx}{x^3 - 3x - 2},$

(b) $\int \frac{6x^2 - 5x + 2}{4x^3 + x + 5} dx,$

(c) $\int \frac{x^2 + 1}{x^4 + x^2 + 1} dx.$

Zadatak 2 Izračunajte:

(a) $\int \operatorname{tg}(x) dx,$

(b) $\int \operatorname{ctg}(x) dx,$

(c) $\int (\sin(x)^5 + \cos(x)^5) dx,$

(d) $\int \sin(x)^4 \cos(x)^2 dx.$

Zadatak 3 Izračunajte:

(a) $\int \frac{\sqrt{1-x^2}}{x^4} dx,$

(b) $\int \frac{\sqrt{1-x^2}}{x^3} dx.$