

Analiza II (TKN) – 28.2/2.3.2017. Zadaci za samostalan rad uz vježbe br. 3 i 4

[Z1] Izračunati integrale:

a) $\int \frac{dx}{\sqrt{2x^2 - 6x + 5}}$

b) $\int \sqrt{x^2 - 2x - 1} dx$

c) $\int \frac{x}{\sqrt{5 + x - x^2}} dx$

d) $\int \frac{dx}{\sin x + 2\cos x + 3}$

[Z2] Izračunati integrale:

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

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

c) $\int \frac{dx}{x(x^3 + 4)}$

d) $\int \frac{x^6}{(x^2 - 5)^4} dx$

e) $\int \frac{x^4 - 1}{x(x^4 - 5)(x^5 - 5x + 1)} dx$

[Z3]* Izračunati integral:

$$\int \frac{dx}{1 + x^{2n}} \quad (n \in \mathbb{N})$$