

Matematička analiza 1 - 18. auditorna vježba - 15.12.2023.

Zadatak 1 Izračunajte:

(a) $\int x^2 e^x dx,$

(b) $\int (x \sin x)^2 dx,$

(c) $\int \cos(2x) dx,$

(d) $\int \cos(\ln x) dx.$

Zadatak 2 Izračunajte:

(a) $\int \sin(\sqrt{x}) dx,$

(b) $\int x e^{x^2} (1 + x^2) dx,$

(c) $\int \sqrt{x} e^{\sqrt{x}} dx.$

Zadatak 3 Izračunajte:

(a) $\int \frac{2x + 4}{x^2 + 6x + 10} dx,$

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

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