

Rješenja 11. domaće zadaće iz Matematike 1

Zad 1.

a) $-1/(3x^3) - 1/x^2$

b) $(2(3+x^2))/(3\sqrt{x})$

Zad 2.

a) 2005/42

b) 116/135

Zad 3.

a) 7/3

b) 1

Zad 4.

a) $2/3(-2+e^x)\sqrt{1+e^x}$

b) $\ln[x]^4/4$

Zad 5.

a) $-x - \text{Ctg}[x]$

b) $1/2 \text{Log}[\text{Cosh}[2x]]$

Zad 6. $1/18(47-9e^2+4e^3)$

Zad 7. 848/105

Zad 8.

$$\frac{4}{3}(-8 + 9 \ln[3])$$

Zad 9.

$$\frac{\pi}{12}$$

Zad 10.

$$-1 + \frac{3 \ln[3]}{2}$$

Zad 11.

$$\frac{1}{5}(9 + \cos[2x])\sqrt{\sin[x]}$$

Zad 12.

$$-\frac{1}{27} (-2 + 9x^2) \cos[3x] + \frac{2}{9} x \sin[3x]$$

Zad 13.

$$\frac{1}{8} (-\cos[2x] + 2x(x - \sin[2x]))$$

Zad 14.

$$-x \operatorname{Ctg}[x] + \ln[\sin[x]]$$

Zad 15.

$$-\frac{x^2}{2} + \ln[\cos[x]] + x \operatorname{Tg}[x]$$

Zad 16.

$$2 - \frac{4}{e}$$

Zad 17.

$$(-1 + \ln[\sin[x]]) \sin[x]$$

Zad 18.

$$-\frac{1}{4} e^{-x} (\cos[x] + e^{2x} \cos[x] + \sin[x] - e^{2x} \sin[x])$$

Zad 19.

$$-\frac{1}{2} x (\cos[\ln[x]] - \sin[\ln[x]])$$

Zad 20.

$$2 - \frac{2}{e}$$