

1 Tabela osnovnih odvodov

$$(1) \quad (x^r)' = rx^{r-1} \quad \text{za } r \in \mathbb{R}$$

$$(6) \quad (\sin x)' = \cos x$$

$$(2) \quad (e^x)' = e^x$$

$$(7) \quad (\cos x)' = -\sin x$$

$$(3) \quad (a^x)' = a^x \ln a \quad \text{za } a > 0$$

$$(4) \quad (\ln x)' = \frac{1}{x}$$

$$(8) \quad (\arcsin x)' = \frac{1}{\sqrt{1-x^2}}$$

$$(5) \quad (\log_a x)' = \frac{1}{x \ln a} \quad \text{za } a > 0$$

$$(9) \quad (\arctan x)' = \frac{1}{1+x^2}$$

2 Tabela osnovnih integralov

$$(10) \quad \int x^r dx = \frac{1}{r+1} x^{r+1} + C \quad \text{za } r \neq -1$$

$$(16) \quad \int \frac{1}{\cos^2 x} dx = \tan x + C$$

$$(11) \quad \int \frac{1}{x} dx = \ln |x| + C$$

$$(17) \quad \int \frac{1}{\sin^2 x} dx = -\cot x + C$$

$$(12) \quad \int e^x dx = e^x + C$$

$$(18) \quad \int \frac{1}{1+x^2} dx = \arctan x + C$$

$$(13) \quad \int a^x dx = \frac{1}{\ln a} a^x + C$$

$$(14) \quad \int \sin x dx = -\cos x + C$$

$$(19) \quad \int \frac{1}{\sqrt{1-x^2}} dx = \arcsin x + C$$

$$(15) \quad \int \cos x dx = \sin x + C$$

$$(20) \quad \int \frac{1}{\sqrt{x^2+a}} dx = \ln(x + \sqrt{x^2+a}) + C$$