Zadaci 4

1

(%i1) integrate((3*x+5)/(x^2+x+1),x);

$$(\%o1) \quad \frac{3 \log\left(x^2+x+1\right)}{2}+\frac{7 \operatorname{atan}\left(\dfrac{2\,x+1}{\sqrt{3}}\right)}{\sqrt{3}}$$

2

(%i2) integrate(x*%e^x,x);

$$(\%o2) \quad \left(x-1\right)\%e^{x}$$

3

(%i3) integrate(x^(-1/5),x,4,5);

$$(\%o3) \quad \frac{5^{9/5}}{4}-\frac{5}{4^{1/5}}$$

(%i4) ratsimp(%);

$$(\%o4) \quad \frac{4^{1/5}\,5^{9/5}-20}{4^{6/5}}$$

(%i5) radcan(%);

$$(\%o5) \quad \frac{2^{2/5}\,5^{9/5}-20}{2^{12/5}}$$

4

(%i6) integrate(1/(5+3*cos(x)^2),x,0,%pi/2);

$$(\%o6) \quad \frac{\pi}{4\,\sqrt{10}}$$

5

(%i7) integrate(1/(1+x^2),x,1,inf);

$$(\%o7) \quad \frac{\pi}{4}$$

6

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(%i8) integrate(log(x)^2/x^2,x,1,inf);
(%o8) 2
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