

Newtonův integrál, týden 6, cvičení 11

Vypočtěte následující integrály

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| 1. $\int_0^2 1-x dx$ | 6. $\int_0^\pi \log \sin x dx$ | 11. $\int_{\pi/6}^{5\pi/6} \frac{\cos 2x dx}{ \sin x - \cos x }$ | 15. $\int_0^{2\pi} \frac{dx}{2 + \sin x}$ |
| 2. $\int_0^\infty \frac{dx}{x^2 + 3x + 2}$ | 7. $\int_0^{2\pi} x^2 \cos x dx$ | 12. $\int_0^{6\pi} \frac{x \sin(x^2) dx}{2 + \sin(x^2)}$ | 16. $\int_0^\infty \frac{dx}{(x+1)\sqrt{x^2+1}}$ |
| 3. $\int_0^{100\pi} \sqrt{1 - \cos 2x} dx$ | 8. $\int_{-1}^\infty \frac{dx}{\sqrt{x+1} + \sqrt{(x+1)^3}}$ | 13. $\int_{-\infty}^\infty \frac{e^x dx}{e^{2x} + e^x + 1}$ | 17. $\int_0^1 \frac{dx}{\sqrt{1-x^2}}$ |
| 4. $\int_{\frac{1}{e}}^e \log x dx$ | 9. $\int_0^{5\pi} \frac{dx}{\sin^2 x + 2 \cos^2 x}$ | 14. $\int_0^1 x^2 \arctan x dx$ | 18. $\int_0^1 \frac{\log x dx}{\sqrt{1-x^2}}$ |
| 5. $\int_0^{\log 2} \sqrt{e^x - 1} dx$ | 10. $\int_1^3 \frac{dx}{x\sqrt{-x^2+4x-3}}$ | | |
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