

### Neurčitý integrál - několik lehkých příkladů

$$1. \int \left( \frac{\sin x \cdot \cos x}{1 + (\sin x)^4} + \frac{\ln x}{x(\ln^2 x - 2 \ln x + 2)(\ln x - 1)} \right) dx$$

$$2. \int \left( \frac{\cos x}{\sqrt{3 - \sin x}} + \frac{4 - \sqrt{x}}{x(x + 2\sqrt{x} + 2)} \right) dx$$

$$3. \int \left( \frac{\ln x}{x \cdot \sqrt{1 - \ln^2 x}} + \frac{3e^x + 5}{e^{2x} + 4e^x + 5} \right) dx$$

$$4. \int \left( \frac{x}{1 + x^4} + \frac{7\sqrt{x} - 20}{2x(x - 6\sqrt{x} + 10)} \right) dx$$

$$5. \int \left( \frac{\ln x}{1 + \ln^4 x} \cdot \frac{1}{x} + \frac{7e^x - 20}{e^{2x} - 6e^x + 10} \right) dx$$

$$6. \int \left( \frac{1}{x^2} \ln\left(1 - \frac{1}{x}\right) + \frac{2e^{2x} - 5}{e^{2x} + 4e^x + 5} \right) dx$$

$$7. \int \left( \frac{1}{x^3} \operatorname{arctg}\left(\frac{1}{x^2}\right) + \frac{\sqrt{x} - 1}{x(x - 2\sqrt{x} + 2)} \right) dx$$

$$8. \int \left( \frac{\cos x - 1}{(\cos x)^2 - 2 \cos x + 2} \sin x + \frac{1}{2x\sqrt{\ln x}} \right) dx$$