

DOMÁCÍ ÚKOL Č. 13

Vypočtěte:

(1) $\int_{-8}^{-1} \frac{dx}{\sqrt[3]{x}};$

(2) $\int_0^{3\pi} x \sin x \, dx;$

(3) $\int_0^{\frac{\pi}{2}} \sin^3 x \cos^2 x \, dx;$

(4) $\int_{\frac{1}{e}}^e |\ln x| \, dx;$

(5) $\int_1^9 x \sqrt[3]{1-x} \, dx;$

(6) $\int_4^{10} \frac{x}{\sqrt{x^2-9}} \, dx;$

(7) $\int_0^{\sqrt[5]{2}} \frac{x^9}{(1+x^9)^3} \, dx;$

(8) $\int_{e^2}^{\sqrt{e}} \frac{\sqrt{2+\ln x}}{x} \, dx;$

(9) $\int_{-3}^0 \sqrt{9-x^2} \, dx.$