

Вычислите:

○49.1. а) $\int_{-\frac{2}{3}}^1 x^3 dx$; б) $\int_1^3 \frac{dx}{x^2}$; в) $\int_{-1}^2 x^4 dx$; г) $\int_4^9 \frac{dx}{\sqrt{x}}$.

○49.2. а) $\int_{\frac{\pi}{2}}^{\pi} \sin x dx$; б) $\int_{-\frac{\pi}{4}}^{\frac{\pi}{4}} \frac{dx}{\cos^2 x}$; в) $\int_{\frac{\pi}{2}}^{\frac{\pi}{2}} \cos x dx$; г) $\int_{\frac{\pi}{4}}^{\frac{\pi}{2}} \frac{dx}{\sin^2 x}$.