

$\int_1^2 (x^2 - 3x + 2) dx$	$-\frac{1}{6}$
$\int_0^3  1 - 3x  dx$	$\frac{65}{6}$
$\int_{-4}^{-2} \frac{1}{x} dx$	$-\ln 2$
$\int_0^1 \frac{dx}{1+x^2}$	$\frac{\pi}{4}$
$\int_0^2 \frac{x}{x^2+3x+2} dx$	$\ln \frac{4}{3}$
$\int_0^\pi \cos x dx$	$0$
$\int_0^\pi  \cos x  dx$	$2$
$\int_0^\pi \sin^3 x dx$	$\frac{4}{3}$
$\int_3^7 \frac{x}{x^2-4} dx$	$\ln 3$
$\int_0^{\frac{\pi}{2}} \cos x \cdot \sin^2 x dx$	$\frac{1}{3}$
$\int_0^1 \frac{\sqrt{x}}{1+\sqrt{x}} dx$	$\ln 4 - 1$
$\int_{-1}^1 \frac{dx}{(1+x^2)^2}$	$\frac{\pi+1}{2}$
$\int_0^{\sqrt{2}} \sqrt{4-x^2} dx$	$1 + \frac{\pi}{2}$
$\int_0^{\ln 5} \frac{e^x \sqrt{e^x-1}}{e^x+3} dx$	$4 - \pi$
$\int_1^2 \frac{dx}{\sqrt{3+2x-x^2}}$	$\frac{\pi}{6}$
$\int_0^{\frac{\pi}{2}} \frac{\sin \varphi}{6-5 \cos \varphi + \cos^2 \varphi} d\varphi$	$\ln \frac{4}{3}$
$\int_0^1 x e^{-x} dx$	$\frac{e-2}{e}$
$\int_1^e \ln x dx$	$1$
$\int_0^{\frac{\pi}{2}} x \sin x dx$	$1$
$\int_1^2 x \ln x dx$	$2 \ln 2 - \frac{3}{4}$
$\int_0^1 x^3 e^{2x} dx$	$\frac{e^2+3}{8}$
$\int_0^{\frac{\pi}{2}} e^{2x} \sin x dx$	$\frac{2}{5} e^\pi + \frac{1}{5}$
$\int_{\frac{\pi}{3}}^{\frac{\pi}{4}} x \sin^{-2} x dx$	$\frac{\pi}{3} - \frac{\sqrt{3}}{3} \pi + \frac{1}{2} \ln 2$
$\int_{-1}^1 \arccos x dx$	$\pi$
$\int_0^{\sqrt{3}} x \operatorname{arctg} x dx$	$\frac{2}{3} \pi - \frac{\sqrt{3}}{2}$

$$\int_0^{\ln 2} x \cosh x \, dx$$

$$\frac{1}{4}(3 \ln 2 - 1)$$

$$I_n = \int_0^{\frac{\pi}{2}} \sin^n x \, dx$$

$$I_0 = \frac{\pi}{2}, I_1 = 1, I_n = \frac{n-1}{n} I_{n-2}, n \geq 2$$