$$\frac{d}{dx}\int_{-1}^{x} dt\cos 2t\text{:}\quad \frac{d}{dx}\int_{0}^{x^2} dt\, e^{xt^2}\text{:}\quad \frac{d}{dx}\int_{-x}^{3} dt\, t^4\text{:}\quad \frac{d}{dx}\int_{-x}^{x} dt\sin\, t^2$$

$$\frac{d}{dx}\int_{\sin x}^{1+\cos x} dt\left(1+t^2/4\right)^{5/2}\text{:}\quad \frac{d}{dx}\int_{1}^{x^2} dt\log t$$

$$\frac{d}{dx}\int_{\sqrt{x^2+2}}^{e^x\sin x} dt\cos^2\left(t^2+\frac{\log^{t^2+1}}{e^t}\right)$$