24. $\displaystyle\int_a^x \cos[\lambda(x-t)]y(t)\,dt = f(x), \qquad f(a) = 0.$

Solution: $y(x) = f_x'(x) + \lambda^2 \displaystyle\int_a^x f(x)\,dx.$

Reference

Polyanin, A. D. and Manzhirov, A. V., *Handbook of Integral Equations*, CRC Press, Boca Raton, 1998.

http://eqworld.ipmnet.ru/en/solutions/ie/ie0124.pdf