



1. $\int_a^x (x-t)y(t) dt = f(x), \quad f(a) = f'_x(a) = 0.$

Solution: $y(x) = f''_{xx}(x).$

Reference

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