



38.
$$\int_a^x \frac{y(t) dt}{\sqrt{g(x)-g(t)}} = f(x), \quad g'_x(x) > 0.$$

Solution:
$$y(x) = \frac{1}{\pi} \frac{d}{dx} \int_a^x \frac{f(t)g'_t(t) dt}{\sqrt{g(x)-g(t)}}.$$

Reference

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