



25.
$$\int_a^x \{\cos[\lambda(x-t)] - 1\} y(t) dt = f(x), \quad f(a) = f'_x(a) = f''_{xx}(0) = 0.$$

Solution:
$$y(x) = -\frac{1}{\lambda^2} f'''_{xxx}(x) - f'_x(x).$$

Reference

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