

$$2. \quad \int_0^a \frac{y(t)}{\sqrt{|x-t|}} dt = f(x), \qquad 0 < a \le \infty.$$

$$y(x) = -\frac{A}{x^{1/4}} \frac{d}{dx} \left[\int_{x}^{a} \frac{dt}{(t-x)^{1/4}} \int_{0}^{t} \frac{f(s) ds}{s^{1/4} (t-s)^{1/4}} \right], \quad A = \frac{1}{\sqrt{8\pi} \Gamma^{2}(3/4)}.$$

References

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