

11.
$$y(x) - \lambda \int_0^\infty \sin(xt)y(t) dt = f(x)$$
.

Solution:

$$y(x) = \frac{f(x)}{1 - \frac{\pi}{2}\lambda^2} + \frac{\lambda}{1 - \frac{\pi}{2}\lambda^2} \int_0^\infty \sin(xt)f(t) dt, \qquad \lambda \neq \pm \sqrt{2/\pi}.$$

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