

9. 
$$y(x) + \lambda \int_{-\infty}^{\infty} \frac{y(t) dt}{\cosh[b(x-t)]} = f(x)$$
.

Solution for  $b > \pi |\lambda|$ :

$$y(x) = f(x) - \frac{2\lambda b}{\sqrt{b^2 - \pi^2 \lambda^2}} \int_{-\infty}^{\infty} \frac{\sinh[2k(x-t)]}{\sinh[2b(x-t)]} f(t) dt, \qquad k = \frac{b}{\pi} \arccos\left(\frac{\pi \lambda}{b}\right).$$

## References

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