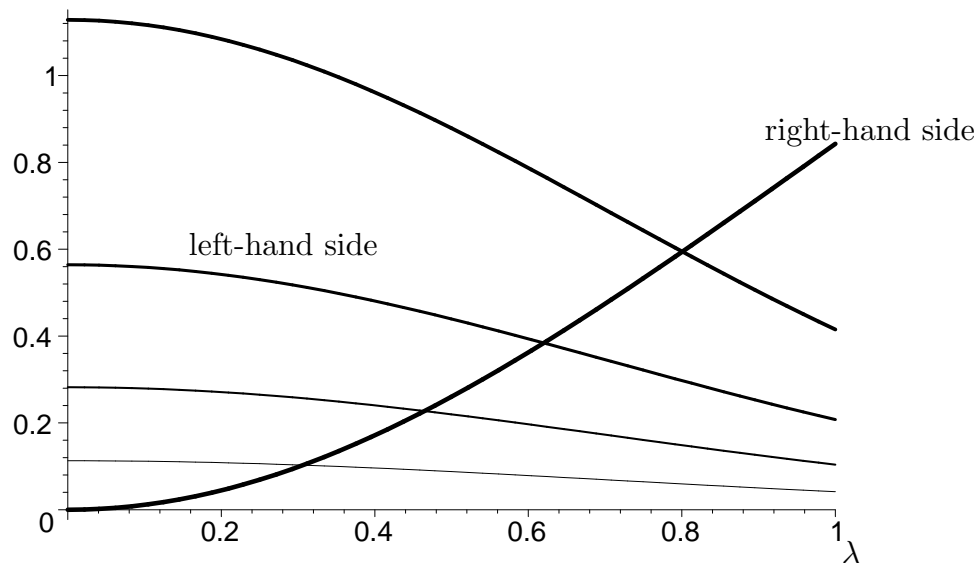


# Stefan Problem

In class we determined that the solution of the Stefan problem was given by

$$T(x, t) = 1 - \frac{1}{\operatorname{erf} \lambda} \operatorname{erf} \left( \frac{x}{2\sqrt{t}} \right), \quad (1a)$$

$$\frac{\operatorname{Ste}^{-\lambda^2}}{\sqrt{\pi}} = \lambda \operatorname{erf} \lambda. \quad (1b)$$



Left- and right-hand sides of (1b) *vs.*  $\lambda$ . In increasing order of thickness:  $\lambda = 0.2, 0.5, 1, 2$ .