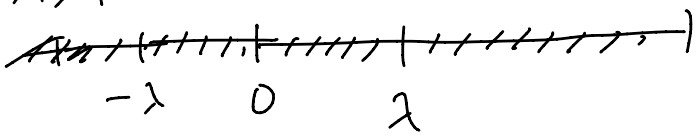
16.

$\mathrm{sign}(x)(|x|-\lambda)_+$



$x \geq \lambda$ のとき.

$\mathrm{sign}(x) = 1,\ (|x|-\lambda)_+ = x-\lambda$

$0 \leq x \leq \lambda$ のとき.

$\mathrm{sign}(x) = 1,\ (|x|-\lambda)_+ = 0$

$-\lambda \leq x \leq 0$ のとき

$\mathrm{sign}(x) = -1,\ (|x|-\lambda)_+ = 0.$

$x \leq -\lambda$ のとき.

$\mathrm{sign}(x) = -1,\ (|x|-\lambda)_+ = -x-\lambda.$

よって,

$$\mathrm{sign}(x)(|x|-\lambda)_+ = \begin{cases} x-\lambda & (x > \lambda) \\ 0 & (|x| \leq \lambda) \\ x+\lambda & (x < -\lambda) \end{cases}$$