$$P[N(t+s)-N(s)=n]=e^{-\lambda t}\frac{(\lambda t)^n}{n!}\,, \quad n=0,1,...$$

$$p(x)=P(W_q \leq x)=1-\frac{\lambda}{\mu}e^{-(\mu-\lambda)x}$$

$$\overline{W}_q=\frac{\lambda}{\mu(\mu-\lambda)}$$

$$\widehat{\mu}_M=\frac{\overline{W}_q\lambda+\sqrt{(\overline{W}_q\lambda)^2+4\overline{W}_q\lambda}}{2\overline{W}_q}$$

$$\widehat{p}_M(x)=1-\frac{\lambda}{\widehat{\mu}_M}e^{-(\widehat{\mu}_M-\lambda)x}\,, \quad 0\leq \widehat{p}_M(x)\leq 1 \text{ if } \lambda<\widehat{\mu}_M$$

$$(\widehat{p}_M(x),x)$$

$$(p(x),x)$$

$$\widehat{\mu}_R=\hat{a}c+\hat{b}\lambda$$

$$\left(\frac{\lambda}{c},\frac{\widehat{\mu}_M}{c}\right)$$

$$(\widehat{p}_R(x),x)$$

$$\widehat{p}_R(x)=1-\frac{\lambda}{\hat{a}c+\hat{b}\lambda}e^{-\left(\hat{a}c+\hat{b}\lambda-\lambda\right)x}\,, \quad \lambda<\widehat{\mu}_R$$

$$0 \leq p \leq 1\,, \quad 0 \leq \frac{\lambda}{\hat{a}c + \hat{b}\lambda} \leq 1$$

$$\begin{aligned}
p &= 1 - \frac{\lambda}{\hat{a}c + \hat{b}\lambda} e^{-\left(\hat{a}c + \hat{b}\lambda - \lambda\right)x} \\
\frac{\lambda}{\hat{a}c + \hat{b}\lambda} e^{-\left(\hat{a}c + \hat{b}\lambda - \lambda\right)x} &= 1 - p \\
\frac{\lambda}{1-p} e^{\lambda x - \left(\hat{a}c + \hat{b}\lambda\right)x} &= \hat{a}c + \hat{b}\lambda \\
\frac{\lambda}{1-p} e^{\lambda x} &= \left(\hat{a}c + \hat{b}\lambda\right) e^{\left(\hat{a}c + \hat{b}\lambda\right)x} \\
\frac{\lambda x}{1-p} e^{\lambda x} &= \left(\hat{a}c + \hat{b}\lambda\right) x e^{\left(\hat{a}c + \hat{b}\lambda\right)x} \\
W_0\left(\frac{\lambda}{1-p} e^{\lambda x}\right) &= \left(\hat{a}c + \hat{b}\lambda\right) x \\
c_R &:= \frac{1}{\hat{a}x}\left\{W_0\left(\frac{\lambda x}{1-p} e^{\lambda x}\right) - \hat{b}\lambda x\right\}
\end{aligned}$$

$$c \approx c_R$$