"WeibullRV(a,b)"

$$[x \mapsto b\,a^b x^{b-1} e^{-(a\,x)^b}]$$

$$t \mapsto t^2$$

Probability Distribution Function

$$f(x) = 1/2\,b\,a^b x^{b/2-1} e^{-a^b x^{b/2}} \qquad 0 < x < \infty$$

$$t \mapsto \sqrt{t}$$

Probability Distribution Function

$$f(x) = 2\,\frac{b\,a^b \left(x^2\right)^b e^{-a^b \left(x^2\right)^b}}{x} \qquad 0 < x < \infty$$

$$t \mapsto t^{-1}$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b \left(x^{-1}\right)^b e^{-a^b \left(x^{-1}\right)^b}}{x} \qquad 0 < x < \infty$$

$$t \mapsto \arctan(t)$$

Probability Distribution Function

$$f(x) = b\,a^b \left(\tan(x)\right)^{b-1} e^{-a^b (\tan(x))^b} \left(1 + (\tan(x))^2\right) \qquad 0 < x < \pi/2$$

$$t \mapsto e^t$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\left(\ln\left(x\right)\right)^{b-1}\,\mathrm{e}^{-a^b\left(\ln(x)\right)^b}}{x} \qquad 1 < x < \infty$$

$$t \mapsto \ln\left(t\right)$$

Probability Distribution Function

$$f(x) = b\,a^b\mathrm{e}^{-a^b\mathrm{e}^{b\,x}+b\,x} \qquad -\infty < x < \infty$$

$$t \mapsto \mathrm{e}^{-t}$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\left(-\ln\left(x\right)\right)^{b-1}\,\mathrm{e}^{-a^b\left(-\ln(x)\right)^b}}{x} \qquad 0 < x < 1$$

$$t \mapsto -\ln\left(t\right)$$

Probability Distribution Function

$$f(x) = b\,a^b\mathrm{e}^{-a^b\mathrm{e}^{-b\,x}-b\,x} \qquad -\infty < x < \infty$$

$$t \mapsto \ln\left(t+1\right)$$

Probability Distribution Function

$$f(x) = b\,a^b\left(\mathrm{e}^x-1\right)^{b-1}\,\mathrm{e}^{-a^b\left(\mathrm{e}^x-1\right)^b+x} \qquad 0 < x < \infty$$

$$t \mapsto \left(\ln\left(t+2\right)\right)^{-1}$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\left(e^{x^{-1}}-2\right)^{b-1}}{x^2} e^{-\frac{a^b\left(e^{x^{-1}}-2\right)^b x-1}{x}} \qquad 0 < x < (\ln(2))^{-1}$$

$$t \mapsto \tanh(t)$$

Probability Distribution Function

$$f(x) = -\frac{b\,a^b\,(\operatorname{arctanh}(x))^{b-1}\,e^{-a^b(\operatorname{arctanh}(x))^b}}{x^2-1} \qquad 0 < x < 1$$

$$t \mapsto \sinh(t)$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\,(\operatorname{arcsinh}(x))^{b-1}\,e^{-a^b(\operatorname{arcsinh}(x))^b}}{\sqrt{x^2+1}} \qquad 0 < x < \infty$$

$$t \mapsto \operatorname{arcsinh}(t)$$

Probability Distribution Function

$$f(x) = b\,a^b\,(\sinh(x))^{b-1}\,e^{-a^b(\sinh(x))^b}\cosh(x) \qquad 0 < x < \infty$$

$$t \mapsto \operatorname{csch}(t+1)$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\,(-1+\operatorname{arccsch}(x))^{b-1}\,e^{-a^b(-1+\operatorname{arccsch}(x))^b}}{\sqrt{x^2+1}\,|x|} \qquad 0 < x < 2\left(e-e^{-1}\right)^{-1}$$

$$t \mapsto \operatorname{arccsch}(t+1)$$

Probability Distribution Function

$$f(x) = -\frac{b\,a^b \cosh(x)}{(\sinh(x)-1)\sinh(x)} \left(-\frac{\sinh(x)-1}{\sinh(x)}\right)^b \mathrm{e}^{-a^b\left(-\frac{\sinh(x)-1}{\sinh(x)}\right)^b} \qquad 0 < x < \ln\left(1+\sqrt{2}\right)$$

$$t \mapsto (\tanh(t+1))^{-1}$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\left(-1+\operatorname{arctanh}\left(x^{-1}\right)\right)^{b-1} \mathrm{e}^{-a^b\left(-1+\operatorname{arctanh}\left(x^{-1}\right)\right)^b}}{x^2-1} \qquad 1 < x < \frac{\mathrm{e}+\mathrm{e}^{-1}}{\mathrm{e}-\mathrm{e}^{-1}}$$

$$t \mapsto (\sinh(t+1))^{-1}$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\left(-1+\operatorname{arcsinh}\left(x^{-1}\right)\right)^{b-1} \mathrm{e}^{-a^b\left(-1+\operatorname{arcsinh}\left(x^{-1}\right)\right)^b}}{\sqrt{x^2+1}\,|x|} \qquad 0 < x < 2\left(\mathrm{e}-\mathrm{e}^{-1}\right)^{-1}$$

$$t \mapsto (\operatorname{arcsinh}(t+1))^{-1}$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\left(-1+\sinh\left(x^{-1}\right)\right)^{b-1} \mathrm{e}^{-a^b\left(-1+\sinh\left(x^{-1}\right)\right)^b}\cosh\left(x^{-1}\right)}{x^2} \qquad 0 < x < \left(\ln\left(1+\sqrt{2}\right)\right)^{-1}$$

$$t \mapsto (\operatorname{csch}(t))^{-1} + 1$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\left(\operatorname{arccsch}\left((x-1)^{-1}\right)\right)^{b-1} \mathrm{e}^{-a^b\left(\operatorname{arccsch}\left((x-1)^{-1}\right)\right)^b}}{\sqrt{x^2-2\,x+2}} \qquad 1 < x < \infty$$

$$t \mapsto \tanh\left(t^{-1}\right)$$

Probability Distribution Function

$$f(x) = -\frac{b\,a^b\left((\operatorname{arctanh}(x))^{-1}\right)^b \mathrm{e}^{-a^b\left((\operatorname{arctanh}(x))^{-1}\right)^b}}{\operatorname{arctanh}(x)\,(x^2-1)} \qquad 0 < x < 1$$

$$t \mapsto \operatorname{csch}\left(t^{-1}\right)$$

Probability Distribution Function

$$f(x) = \frac{b\,a^b\,(\operatorname{arccsch}(x))^{-b-1}\,\mathrm{e}^{-a^b(\operatorname{arccsch}(x))^{-b}}}{\sqrt{x^2+1}\,|x|} \qquad 0 < x < \infty$$

$$t \mapsto \operatorname{arccsch}\left(t^{-1}\right)$$

Probability Distribution Function

$$f(x) = b\,a^b\,(\sinh(x))^{b-1}\,\mathrm{e}^{-a^b(\sinh(x))^b}\cosh(x) \qquad 0 < x < \infty$$