"MuthRV(a)"

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

$$t \mapsto t^2$$

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

$$f(x) = \frac{-x^a a + x^{2\,a}}{x} \mathrm{e}^{-\frac{x^a - 1}{a}} \qquad 1 < x < \infty$$

$$t \mapsto \ln(t)$$

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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