"ExponentialRV(a)"

$$[x \mapsto a e^{-ax}]$$

$$t \mapsto t^2$$

Probability Distribution Function

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

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

Probability Distribution Function

$$f(x) = 2 a e^{-a x^2} x$$
  $0 < x < \infty$ 

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

Probability Distribution Function

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

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

Probability Distribution Function

$$f(x) = \frac{a}{(\cos(x))^2} e^{-\frac{a \sin(x)}{\cos(x)}}$$
  $0 < x < \pi/2$ 

$$t \mapsto e^t$$

$$f(x) = a x^{-a-1} \qquad 1 < x < \infty$$

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

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

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

Probability Distribution Function

$$f(x) = a x^{a-1} \qquad 0 < x < 1$$

 $t \mapsto -\ln(t)$ 

Probability Distribution Function

$$f(x) = a e^{-a e^{-x} - x}$$
  $-\infty < x < \infty$ 

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

Probability Distribution Function

$$f(x) = a e^{-a e^x + a + x} \qquad 0 < x < \infty$$

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

Probability Distribution Function

$$f(x) = \frac{a}{x^2} e^{-\frac{a x e^{x^{-1}} - 2 a x - 1}{x}}$$
  $0 < x < (\ln(2))^{-1}$ 

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

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

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

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

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

Probability Distribution Function

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

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

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

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

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

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

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